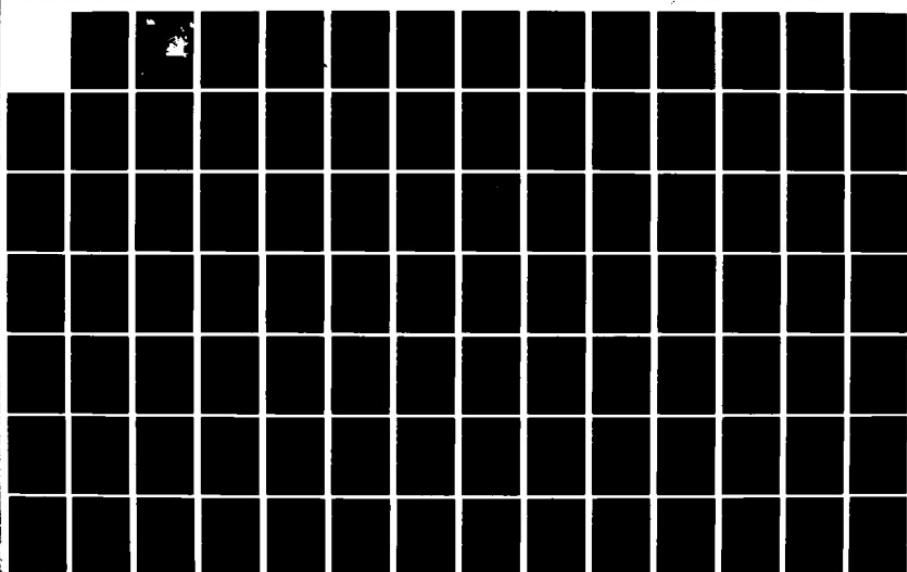


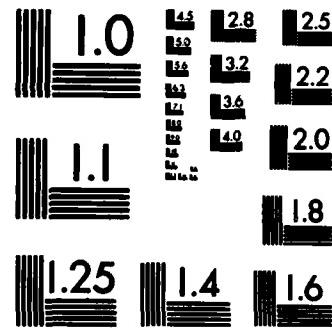
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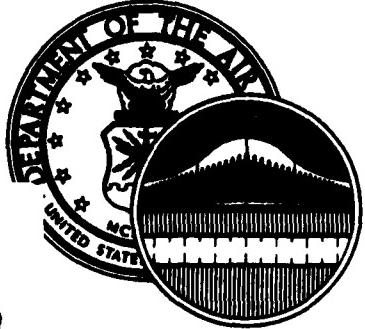
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UNITED STATES AIR FORCE

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ELECTED
OCT 20 1982

OCCUPATIONAL SURVEY REPORT



BASE VEHICLE EQUIPMENT, SPECIAL VEHICLE, GENERAL
PURPOSE VEHICLE, AND VEHICLE BODY MECHANICS

CAREER LADDERS

AFSS 472X0, 472X1A/B/C/D, 472X2 AND 472X3

AFPT 90-472-442

AUGUST 1982

FILE COPY

OCCUPATIONAL ANALYSIS PROGRAM
USAF OCCUPATIONAL MEASUREMENT CENTER
AIR TRAINING COMMAND
RANDOLPH AFB, TEXAS 78150

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HQ PACAF/DPAT	3		
HQ SAC/DPAT	3		
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HQ TAC/DPAT	3		
HQ TAC/DPATC	1		
HQ USAF/LBT	1	1	
HQ USAF/MPPT	1	1	
HQ USAFE/DPAT	3		
HQ USAFE/DPATC	1		
HQ USMC/OMU	1	1	
LMDC/AN	1		
NODAC	1	1	
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PREFACE

This report presents the results of an Air Force occupational survey of seven Vehicle Maintenance career ladders (AFSs 472X0 - Base Vehicle Equipment Mechanic, 472X1A/B/C/D - Special Vehicle Mechanic, 472X2 - General Purpose Vehicle Mechanic, and 472X3 - Vehicle Body Mechanic), along with the Vehicle Maintenance Superintendents (AFSC 47299) and the Vehicle Maintenance Managers (CEM Code 47200). This survey was initiated in response to a need for new job information in the career field. Authority for conducting occupational surveys is contained in AFR 35-2.

The Air Force occupational survey program began in 1956 when the Air Force Human Resources Laboratory began initial research designed to develop a methodology for gathering and analyzing occupational information. The present operational occupational survey program was established within the Air Training Command in 1967, with annual completion of 12 occupational survey reports on enlisted specialties. In 1972, the program expanded to produce reports covering 51 career ladders annually. In late 1975, the program expanded further to include the survey of officer utilization fields, to permit special management applications projects, and to support interservice or joint service occupational analyses.

The survey instrument used for this report was constructed by CMSgt Robert M. Wing, Inventory Development Specialist. Second Lieutenant Carlton F. Middleton and Ms Elena J. Weber analyzed the survey data and wrote the final report. Computer products for this report were generated by Mr Robert L. Vance. This report has been reviewed and approved by Lieutenant Colonel Jimmy L. Mitchell, Chief, Airman Career Ladders Analysis Section (OMYO), USAF Occupational Measurement Center, Randolph AFB TX 78150.

Copies of this report are distributed to the organizations listed on page i. Additional copies may be obtained upon request to the USAF Occupational Measurement Center, attention to the Chief, Occupational Analysis Branch (OMY), Randolph AFB TX 78150.

This report has been reviewed and is approved.

PAUL T. RINGENBACH, Colonel, USAF
Commander
USAF Occupational Measurement
Center

WALTER E. DRISKILL, Ph.D.
Chief, Occupational Analysis Branch
USAF Occupational Measurement
Center

SUMMARY OF RESULTS

1. Survey Coverage: This report covers seven Vehicle Maintenance career ladders (AFSs 472X0 - Base Vehicle Equipment Mechanic, 472X1A/B/C/D - Special Vehicle Mechanic, 472X2 - General Purpose Vehicle Mechanic, and 472X3 - Vehicle Body Mechanic). The job inventory was administered worldwide between April and October 1981. The 3,162 respondents in the survey sample represented 71 percent of the assigned Vehicle Maintenance personnel. All career ladders, as well as all major commands, were represented in the survey sample.
2. Job Structure: Twenty-one job groups and independent job types were identified in the analysis, six of which comprised the Vehicle Repair Mechanics functional group which consisted of 68 percent of the survey sample. The analysis showed a high degree of commonality among mechanic jobs, with distinct differences between the vehicle repair mechanics job and those jobs of the tire shop, vehicle body repair, and non-technical personnel. Respondents within the Vehicle Repair Mechanics functional group performed a large number of common tasks regardless of the vehicles maintained. Some mechanics did specialize on firefighting or refueling vehicles and performed tasks specific to these vehicles. Vehicle Body Mechanics (AFS 472X3) grouped separately from other mechanics and performed a distinctly different job.
3. DAFSC Analysis: In all career ladders, the 3- and 5-skill level jobs were highly technical with very little responsibility for supervision or management displayed. The 7-skill level personnel, while still performing many technical tasks, spent the majority of their job time on supervisory, managerial, and administrative functions. Both the 9-skill and CEM code level personnel performed almost a totally non-technical job, with their time devoted to supervision, management, and administration functions.
- Between AFSs 472X0, 472X1A/B/C/D, and 472X2, there was a large degree of commonality in tasks performed and some overlap on vehicles maintained. This overlap was especially true for AFS 472X0 (Base Vehicle Equipment Mechanic), 472X1C (Special Vehicle Mechanic - Materials Handling Equipment), and 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles) mechanics. The AFS 472X3 members had a distinctly different job with almost no task overlap between these members and other vehicle mechanics.
4. AFR 39-1 Specialty Descriptions: Specialty descriptions for AFSS 47231A/51A (Special Vehicle Mechanic - Firetrucks), 47231B/5B (Special Vehicle Mechanic - Refueling Vehicles), 47232/52, 47233/53, and 47271 (Special Vehicle and Base Vehicle Equipment Supervisor) were accurate in displaying the nature of those jobs. The AFSS 472X0, 472X1C, and 472X1D 3- and 5-skill level specialty description adequately described the maintenance tasks performed by these members but did not cover all the vehicles they maintained. Although the AFSC 47273 (General Purpose Vehicle and Body Maintenance Supervisor) specialty description described the non-technical

aspect of the job performed by these technicians, not all these members performed all the technical duties and responsibilities described. The 9-skill level and CEM code description was accurate except for two minor items.

5. Utilization of Vehicle Maintenance Personnel: Personnel holding AFSs 472X1A, 472X1B, 472X2, and 472X3 were properly classified and were being utilized consistent with their specialty descriptions. For AFSs 472X0, 472X1C and 472X1D, there was a substantial amount of overlap in both the tasks performed and vehicles maintained, resulting in a considerable amount of cross utilization between members in these specialties. Additionally, the current merger at the 7-skill level for AFS 472X2 and 472X3 may not be working effectively.

6. Comparison of Current Survey to Previous Surveys: Overall, the job structure has been relatively stable over the years. Similiar results were found between the current survey and the 1978 and 1972 surveys. All three surveys stressed the commonality found between the various vehicle maintenance specialties (excluding AFS 472X3).

7. Implications: Some reorganization of the career ladder is warranted. AFSs 472X0 and 472X1D are excellent candidates for merging. Consolidation or shredding of other specialties would be questionable. The role of the AFS 47273 supervisor needs to be better defined and utilization aligned accordingly.

**OCCUPATIONAL SURVEY REPORT
VEHICLE MAINTENANCE CAREER FIELD
(AFS 472XX)**

INTRODUCTION

→ This is a report of an occupational survey of seven Vehicle Maintenance career ladders (AFSs 472X0 - Base Vehicle Equipment Mechanic, 472X1A/B/C/D - Special Vehicle Mechanic, 472X2 - General Purpose Vehicle Mechanic, and 472X3 - Vehicle Body Mechanic), the Vehicle Maintenance Superintendents (AFSC 47299), and the Vehicle Maintenance Managers (CEM code 47200). This survey was completed by the Occupational Analysis Branch, USAF Occupational Measurement Center, in July 1982. The survey was initiated to obtain current task and background data for use in the evaluation and management of training programs for these career ladders. Previous survey results of the Vehicle Maintenance career field were published in June 1978 and April 1972. ←

Since there are seven specialties at the 3- and 5-skill level, there are seven separate courses to be evaluated, making the training analyses complex enough to be dealt with in a separate study. Due to this complexity and the size of this study, the decision was made not to collect task difficulty and training emphasis data at the same time as task performance data was collected. Task difficulty and training emphasis booklets were mailed to the field on 2 April 1982. Task difficulty and training emphasis data for each specialty, along with an attempt to analyze strength and stamina data will be presented in separate training reports. The six basic entry-level courses conducted at Chanute Technical Training Center for AFSS 472X0 (Base Vehicle Equipment Mechanic), 472X1A/B/C/D (Special Vehicle Mechanic), and 472X2 (General Purpose Vehicle Mechanic) plus the Army basic entry-level course for AFS 472X3 (Vehicle Body Mechanic) taught at the Aberdeen Proving Ground will be evaluated and discussed at that time. Additionally, AFS 472X4 (Vehicle Maintenance Control and Analysis) will be addressed in a separate report to be published later this year. (NOTE: AFSC 47273 was renumbered to 47275, effective 31 October 1981; however, since 47273 was current at the time the job inventory was published and administered to the field and all computer data reflect the old AFSC, the old designation will continue to be used for purposes of this report to avoid possible confusion.)

Background

Historically, the Vehicle Maintenance career field has been fairly stable over the years, with very few classification changes being made since its creation in the early 1950s. The only significant changes in the overall classification structure occurred in July 1970, May 1975, and October 1978. In July 1970, AFS 472X1 (Special Vehicle Repairman) was changed through shredouts to reflect specialization by either firetrucks (A shred), refueling

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vehicles (B shred), or materials handling equipment (C shred). The D shredout for towing and servicing vehicles was added to AFS 472X1 (Special Vehicle Mechanic) in May 1975 to reflect further specialization within the career ladder. In October 1978, job control functions within the 472XX ladders were merged with the responsibilities of AFS 391XOC (Motor Vehicle Maintenance analysis) to form the 472X4 Vehicle Maintenance Control and Analysis career ladder. The Vehicle Maintenance career field (excluding the 472X4 - Vehicle Maintenance Control and Analysis), as shown in Figure 1 (from AFR 39-1), currently consists of seven separate AFSs through the 5-skill level. These seven AFSs merge into two AFSs at the 7-skill level; additionally, there is a common 47299 (Vehicle Maintenance Superintendents) and CEM Code 47200 (Vehicle Maintenance Managers) for the entire 472XX career field.

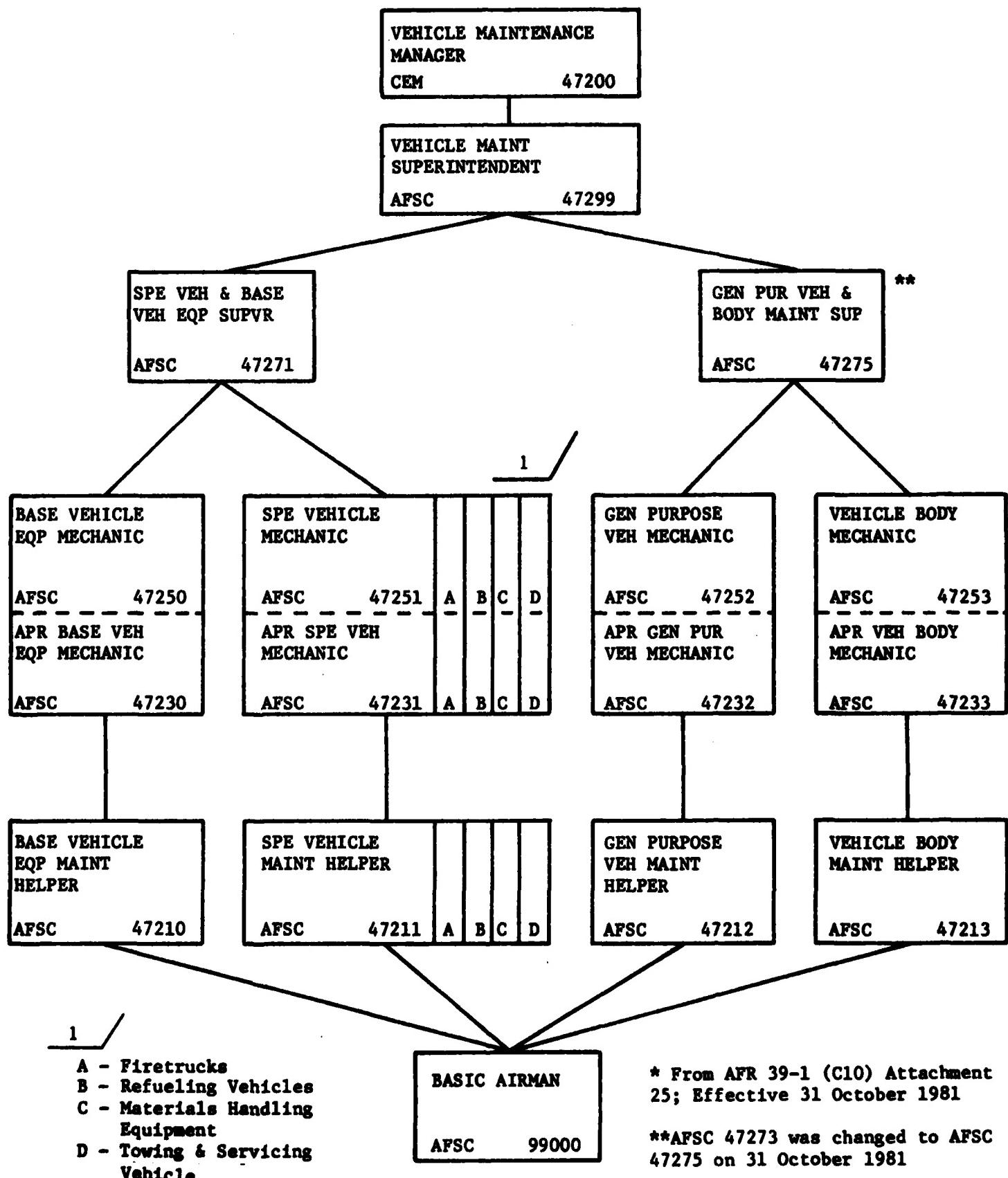
As described in AFR 39-1, AFS 472X0 (Base Vehicle Equipment Mechanic), 472X1A/B/C/D (Special Vehicle Mechanic), and 472X2 (General Purpose Vehicle Mechanic) personnel are responsible for inspecting, maintaining, and repairing various types of vehicles and equipment. The particular type of vehicle or equipment members are responsible for depends on the AFS they possess. AFS 472X0 members are Base Vehicle Equipment Mechanics and are responsible for maintaining base vehicles such as backhoes, dump trucks, and self-propelled graders. Special Vehicle Mechanics possess a 472X1 AFS with either an A/B/C or D shred, and are responsible for maintaining different types of special purpose vehicles and equipment, depending on the shredout they hold. The vehicle and equipment maintained by shred are:

- A-shred - Firetrucks
- B-shred - Refueling Vehicles
- C-shred - Materials Handling Equipment
- D-shred - Towing and Servicing Vehicles

AFS 472X2 members are General Purpose Vehicle Mechanics and are responsible for general purpose vehicles, such as pickup trucks, staff cars, and buses. Vehicle Body Mechanics possess a 472X3 AFS and are the most distinct in terms of the job they perform. These members work on all types of vehicles and are responsible for repairing and replacing body panels, fenders, and radiators; straightening vehicle frames; refinishing vehicle bodies; welding metals; and cutting and fitting vehicle glass.

FIGURE 1*

VEHICLE MAINTENANCE CAREER FIELD
(EXCLUDING AFS 472X4)



SURVEY METHODOLOGY

Inventory Development

CMSgt Robert M. Wing developed USAF Job Inventory AFPT 90-472-442 which was used to collect the present survey data. The 1977 inventory served as the starting point for development of the new inventory. The previous task list was reviewed for accuracy and updated through research of publications and directives, and personal interviews with 17 subject-matter specialists at three bases. This process resulted in a revised job inventory of 773 tasks grouped under 23 duty headings and a background section that requested information about survey respondents, such as grade, TAFMS, job title, work area, equipment maintained, and job interest.

Survey Administration

During the period April through October 1981, consolidated base personnel offices in operational units worldwide administered the inventory booklets to job incumbents with AFSs 472X0 (Base Vehicle Equipment Mechanic), 472X1A/B/C/D (Special Vehicle Mechanic), 472X2 (General Purpose Vehicle Mechanic), 472X3 (Vehicle Body Mechanic), 47299 (Vehicle Maintenance Superintendent), and CEM Code 47200 (Vehicle Maintenance Manager). These job incumbents were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Human Resources Laboratory (AFHRL). Each individual who completed the inventory completed an identification and biographical information section first, then checked each task performed in their current job.

After checking all tasks performed, each incumbent rated each of these tasks on a nine-point scale showing relative time spent on that task as compared to all other tasks checked. The ratings ranged from one (very small amount of time spent) through five (about average time spent) to nine (very large amount of time spent). To determine relative time spent for each task checked by a respondent, all of an incumbent's ratings combined are assumed to account for 100 percent of his or her time spent on the job. Each task rating is then divided by the total task responses and the quotient multiplied by 100. This procedure provides a basis for comparing tasks not only in terms of percent members performing, but also in terms of average percent time spent.

Data Processing and Analysis

Once job inventories are returned from the field, they are prepared so task responses and background information can be optically scanned. Other biographical information (such as name, base, AUTOVON extension) are keypunched onto disks and entered directly into a Univac 1180 computer. Once both sets of data are entered into the computer, the tasks, background, and biographical information are merged to form a complete case record for each respondent. Computer-generated programs using Comprehensive Occupational Data Analysis Program (CODAP) techniques are then applied to the data.

CODAP produces job descriptions for respondents based on their responses to specific inventory tasks. Computer-generated job descriptions are available for DAFSC, TAFMS, and MAJCOM groups, and include such information as percent members performing each task, the average percent time spent performing each task, the percent members utilizing various pieces of equipment, and the cumulative average percent time spent by all members on each task in the inventory.

A key aspect of the Occupational Analysis Program is to examine the job structure of each specialty on the basis of what people are actually doing in the field, rather than on the basis of what official career ladder documents say they are doing. This analysis of actual job structure is made possible by the use of the Comprehensive Occupational Data Analysis Program (CODAP). CODAP is comprised of a number of computer programs which generate the statistical products used in the analysis of an AFSC. The primary product used to analyze career ladders is a hierarchical clustering of all jobs based on the similarity of tasks performed and the relative time spent performing those tasks. Major types of jobs being performed within the specialty are then identified and analyzed in terms of job descriptions and background data provided by each respondent.

The specialty structure analysis process consists of determining the functional job structure of career ladder personnel in terms of job types, clusters, and independent job types. A job type is a group of individuals who perform many of the same tasks and also spend similar amounts of time performing them. When there is a substantial degree of similarity between different job types, they are grouped together and labeled as clusters. Finally, there are often cases of specialized job types that are too dissimilar to be grouped into any cluster. These unique groups are labeled independent job types.

Survey Sample

Personnel are selected to participate in surveys to ensure a representative sample across major command (MAJCOM), duty Air Force specialty code (DAFSC), and paygrade groups. Table 1 reflects the percentage distribution, by major command, of assigned personnel in the career ladder as of the first half of FY 1982, along with the comparative distribution of the survey sample. Table 2 provides a listing of paygrade group distribution, while Table 3 reflects the sample distribution by TAFMS groups. The 3,162 respondents comprising the final sample represent 71 percent of the 4,456 members assigned and appear to reflect career ladder distributions accurately.

TABLE I
COMMAND REPRESENTATION OF SURVEY SAMPLE

COMMAND	472X0*			472X1A*			472X1B*			472X1C*			472X1D*			472X1E		
	PERCENT OF ASSIGNED SAMPLE (N=518)	PERCENT OF ASSIGNED SAMPLE (N=273)	PERCENT OF ASSIGNED SAMPLE (N=189)	PERCENT OF ASSIGNED SAMPLE (N=320)	PERCENT OF ASSIGNED SAMPLE (N=177)	PERCENT OF ASSIGNED SAMPLE (N=282)	PERCENT OF ASSIGNED SAMPLE (N=391)	PERCENT OF ASSIGNED SAMPLE (N=230)	PERCENT OF ASSIGNED SAMPLE (N=317)	PERCENT OF ASSIGNED SAMPLE (N=324)	PERCENT OF ASSIGNED SAMPLE (N=217)	PERCENT OF ASSIGNED SAMPLE (N=379)	PERCENT OF ASSIGNED SAMPLE (N=315)	PERCENT OF ASSIGNED SAMPLE (N=324)	PERCENT OF ASSIGNED SAMPLE (N=317)	PERCENT OF ASSIGNED SAMPLE (N=324)		
TAC	25	27	23	19	21	25	17	17	17	24	24	21	21	21	21	21	21	
SAC	21	19	23	24	21	21	11	9	30	33	18	18	17	17	17	17	17	
USAPE	12	13	18	20	21	25	14	18	13	11	11	19	21	21	21	21	21	
MAC	10	13	11	14	13	13	37	38	9	14	14	12	11	11	11	11	11	
PACAF	9	7	9	11	7	7	8	7	10	6	6	9	9	10	10	10	10	
AFC	8	8	5	6	5	5	5	5	5	3	3	4	4	5	5	5	5	
ATC	5	4	5	4	4	2	2	2	2	3	3	3	3	3	3	3	3	
AFSC	4	6	2	2	0	0	0	0	0	0	0	1	1	1	1	1	1	
OTHER	6	3	4	0	6	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	

COMMAND	472X2*			472X3*			472X3**			47299			47200				
	PERCENT OF ASSIGNED SAMPLE (N=1062)	PERCENT OF ASSIGNED SAMPLE (N=298)	PERCENT OF ASSIGNED SAMPLE (N=203)	PERCENT OF ASSIGNED SAMPLE (N=354)	PERCENT OF ASSIGNED SAMPLE (N=280)	PERCENT OF ASSIGNED SAMPLE (N=79)	PERCENT OF ASSIGNED SAMPLE (N=65)	PERCENT OF ASSIGNED SAMPLE (N=79)	PERCENT OF ASSIGNED SAMPLE (N=65)	PERCENT OF ASSIGNED SAMPLE (N=33)	PERCENT OF ASSIGNED SAMPLE (N=32)	PERCENT OF ASSIGNED SAMPLE (N=33)	PERCENT OF ASSIGNED SAMPLE (N=32)	PERCENT OF ASSIGNED SAMPLE (N=33)	PERCENT OF ASSIGNED SAMPLE (N=32)		
TAC	26	24	22	20	18	23	24	26	26	24	24	24	24	24	24	24	
SAC	18	19	24	27	19	21	19	19	19	19	19	19	19	19	19	19	19
REFIT	22	22	21	22	22	21	22	21	22	22	22	22	22	22	22	22	22
MAC	12	14	13	15	19	19	9	10	10	8	8	8	8	8	8	8	8
PACAF	6	5	5	4	9	8	9	9	9	5	5	5	5	5	5	5	5
AFC	2	3	4	4	2	2	2	2	2	4	4	4	4	4	4	4	4
ATC	3	3	2	2	1	1	8	7	5	1	5	5	5	5	5	5	5
AFSC	4	4	3	3	1	1	5	4	1	5	5	5	5	5	5	5	5
OTHER	7	6	6	3	3	2	7	5	6	1	1	1	1	1	1	1	1
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

* AFSCS 472X0; 472X1A/B/C/D; 472X2; AND 472X3 INCLUDE ALL 3- AND 5-SKILL LEVEL PERSONNEL
** CHANGED TO 472X5 ON 31 OCTOBER 1981

NOTE: ASSIGNED STRENGTH AS OF FIRST HALF OF FY 1982

TOTAL ASSIGNED - 4456
TOTAL SAMPLE - 3162
PERCENT OF ASSIGNED SAMPLE - 71%

TABLE 2

PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

PAYGRADE	472X0		472X1		472X2		472X3	
	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE						
AIRMAN	27	30	30	38	42	16	15	15
E-4	38	38	26	30	28	15	13	13
E-5	35	33	22	25	32	15	25	25
E-6	0	2	15	16	0	2	37	31
E-7	0	0	7	7	0	0	17	16
TOTAL	100	100	100	100	100	100	100	100

* ASSIGNED FIGURES CAME FROM DATA IN THE 11 OCT 81 UNIFORM AIRMAN RECORD (UAR).

TABLE 3

TAFIS DISTRIBUTION OF SURVEY SAMPLE						
TAFIS (MONTHS)	PERCENT OF SAMPLE* (AFSC 472X0)	PERCENT OF SAMPLE* (AFSC 472X1A)	PERCENT OF SAMPLE* (AFSC 472X1B)	PERCENT OF SAMPLE* (AFSC 472X1C)	PERCENT OF SAMPLE* (AFSC 472X1D)	PERCENT OF SAMPLE* (AFSC 472X1E)
1-48	46	45	54	63	67	0
49-96	32	42	23	24	21	9
97-144	15	6	17	10	9	18
145-192	6	6	6	3	2	31
193-240	1	1	0	0	1	29
241+	0	0	0	0	0	0
TOTAL	100	100	100	100	100	100

*AFSCs 472X0, 472X1A/B/C/D, 472X2, AND 472X3 ARE COMPRISED OF 3- AND 5-SKILL LEVEL PERSONNEL.

PERCENT
OF SAMPLE
(AFSC 472X3)

0

52

50

0

28

30

5

13

18

13

30

5

35

2

12

100

100

JOB STRUCTURE ANALYSIS

The number of distinctly different jobs within a specialty or career field sometimes has a great impact on Air Force personnel classification policy, technical training, and on-the-job training (OJT). Thus, this report begins with a description of the jobs within the Vehicle Maintenance career field and how these jobs relate to one another.

Overview

Based on similarity of tasks performed and amount of time spent in performing each task, the jobs performed in the Vehicle Maintenance career field are listed below and illustrated in Figure 2. (Each job group is identified with a group identification number to cross reference the groups to computer printouts included in the statistical summary package provided to selected users. These identification numbers are shown as GRP numbers for each type of job.)

I. VEHICLE REPAIR MECHANICS (GRP056, N=2,155)

- A. General Repair Mechanics (GRP403, N=1,480)
- B. Minor Repair Firefighting Vehicle Mechanics (GRP381, N=48)
- C. Vehicle Body and Minor Repair Mechanics (GRP409, N=13)
- D. Engine and Minor Repair Mechanics (GRP210, N=39)
- E. Minor Repair and Administrative Personnel (GRP106, N=16)
- F. Refueling Vehicle Equipment Mechanics (GRP141, N=38)

II. QUALITY ASSURANCE PERSONNEL (GRP048, N=74)

- A. Quality Control Inspectors (GRP257, N=26)
- B. Diagnostic Inspectors (GRP253, N=39)

III. TIRE SHOP PERSONNEL (GRP027, N=71)

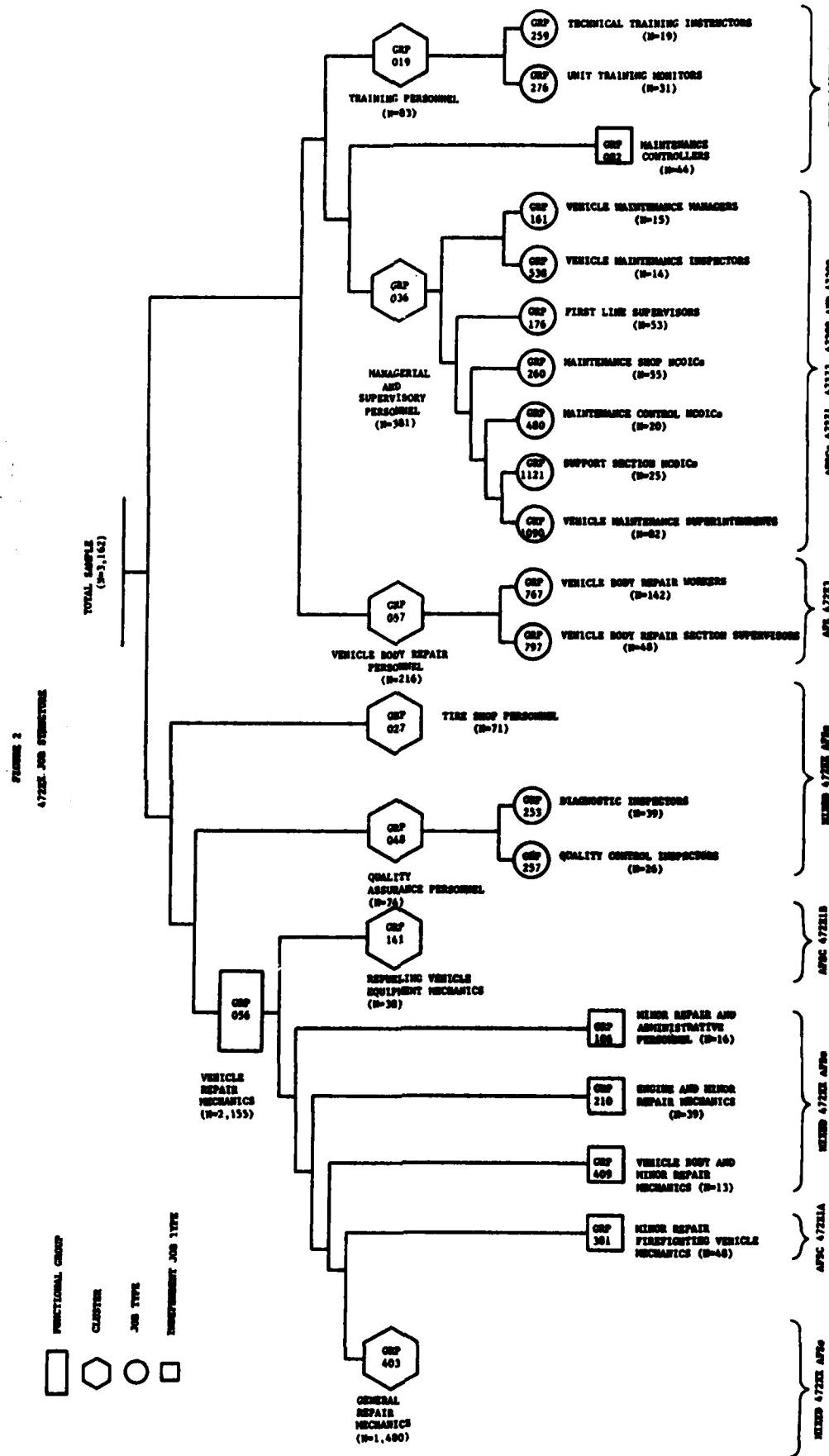
IV. VEHICLE BODY REPAIR PERSONNEL (GRP057, N=216)

- A. Vehicle Body Repair Section Supervisors (GRP797, N=48)
- B. Vehicle Body Repair Workers (GRP767, N=142)

V. MANAGERIAL AND SUPERVISORY PERSONNEL (GRP036, N=381)

- A. Vehicle Maintenance Superintendents (GRP1090, N=82)
- B. Support Section NCOICs (GRP1121, N=25)
- C. Maintenance Control NCOICs (GRP480, N=20)
- D. Maintenance Shop NCOICs (GRP260, N=55)
- E. First-Line Supervisors (GRP176, N=53)
- F. Vehicle Maintenance Inspectors (GRP538, N=14)
- G. Vehicle Maintenance Managers (GRP161, N=15)

VI. MAINTENANCE CONTROLLERS (GRP082, N=41)



VII. TRAINING PERSONNEL (GRP019, N=83)

- A. Unit Training Monitors (GRP276, N=31)
- B. Technical Training Instructors (GRP259, N=19)

The respondents forming these job groups accounted for 96 percent of the total survey sample. The remaining four percent of the sample consisted of respondents who have unique jobs or performed enough unique tasks to make their job substantially different from the groups listed above.

In general, the Job Structure Analysis indicated a high degree of commonality among mechanic jobs, with distinct differences between the vehicle repair mechanics' job and those jobs of the tire shop, vehicle body repair, and non-technical personnel. Respondents within the Vehicle Repair Mechanics functional group performed a large number of common tasks regardless of the vehicle type on which they worked. Some members of this group did specialize on firefighting and refueling vehicles and performed tasks specific to these vehicles in addition to the common tasks performed by other mechanics.

Job Group Descriptions

The following paragraphs contain brief descriptions of the job groups identified through the job structure analysis (Appendix A contains representative task lists, tools and equipment used, and types of vehicles worked on for each of the job groups).

I. VEHICLE REPAIR MECHANICS (GRP056, N=2,155). The Vehicle Repair Mechanics functional group was composed of six distinct job groups and numerous job variations. Of the 3,162 respondents in the total survey sample, 2,155 members, or 68 percent, grouped together in this functional area and basically performed a typical mechanic's job. This rather large group included personnel from each AFSC in the study except for AFSC 47299 (Vehicle Maintenance Superintendent) and CEM Code 47200 (Vehicle Maintenance Manager). Regardless of which AFSC was held or the vehicle worked on, these members all performed a common job. As illustrated in Table 4, all mechanics in this group serviced, removed, installed, and inspected parts and components on vehicle electrical systems. Additionally, all jobs included minor repair work on other vehicle systems such as adjusting brakes, belts, and carburetors; servicing air cleaners, oil systems, and drive belts; and lubricating vehicles.

Although the six distinct jobs identified within this functional area represented the major types of work performed by Vehicle Repair Mechanics, small variations of these basic jobs did exist. These variations centered around emphasis of work and type of vehicles repaired. For example, some mechanics spent more time repairing electrical systems, while others spent

more of their time on drive lines, steering, and suspension systems. Although these small variations existed, the overall job performed was basically the same. In terms of the types of vehicles repaired, the trend was for respondents who held AFS 472X2 (General Purpose Vehicle Mechanic) to work primarily on general purpose vehicles, with a few members spending a small amount of time repairing other types of vehicles. On the other hand, those respondents who held AFSs 472X0, 472X1C, or 472X1D (Base Vehicle Equipment Mechanic, Special Vehicle Mechanic - Materials Handling Equipment, and Special Vehicle Mechanic - Towing and Servicing Vehicles respectively) mainly repaired base vehicles, materials handling equipment, and towing and servicing vehicles, with some members spending a small amount of time working on general purpose vehicles. Regardless of the type of vehicle repaired, the tasks performed by all mechanics were not vehicle-specific. Exceptions to these trends are explained in the following paragraphs where the clusters and job types within this functional area are discussed.

A. General Repair Mechanics (GRP403, N=1,480). This cluster of 1,480 members, consisting of 47 percent of the survey respondents, represented the main type of work performed by vehicle mechanics. Performing an average of 238 tasks, these mechanics had a broad job which included not only the common tasks listed in Table 4, but also major repair work on various types of vehicle systems. General Repair Mechanics repaired, inspected, serviced, and maintained electrical, brake, suspension, and other vehicle systems. This work was performed on general purpose, base, firefighting, refueling, and towing and servicing vehicles, plus materials handling equipment. Although distinct groups of mechanics were identified within this cluster, the majority of work performed by General Repair Mechanics was of a general nature, with members performing a large core of tasks common to any type of vehicle. Overall, these mechanics can be described as generalists whose work includes maintaining all types of systems and system components on a wide variety of different vehicles. Typical tasks performed include:

- removing or installing intake or exhaust manifolds
- removing or installing parking brake cables
- removing or installing head assemblies
- inspecting gasoline fuel system components
- inspecting suspension system components
- isolating hydraulic brake system malfunctions
- inspecting steering mechanism components
- isolating gasoline fuel system malfunctions
- removing or installing rear wheel bearings
- servicing hydraulic brake system components
- adjusting slack adjustors
- servicing automatic transmissions

This cluster was composed of members from each AFS in the study except for AFS 47299 (Vehicle Maintenance Superintendent) and CEM Code 47200 (Vehicle Maintenance Manager). Slightly over half (51 percent) were in their first enlistment. The average paygrade of group members was E4 with an average of 67 months TAFMS.

Within the General Repair Mechanics cluster, five variations of mechanics were identified, one of which was General Repair Firefighting Vehicle Mechanics (GRP1043, N=97). These mechanics primarily held a 472X1A DAFSC (Special Vehicle Mechanic - Firetrucks), were physically located in the fire-truck maintenance shop, and specialized on repairing crash and firefighting vehicles. Overall these members were General Repair Mechanics who primarily maintained firetrucks and specialized on the systems and equipment specific to firefighting vehicles. The firetruck-specific maintenance involved working on special hydraulic, pneumatic or pumping systems, and included tasks such as:

- adjusting firefighting pump packings
- isolating firefighting equipment turret control malfunctions
- isolating firefighting pumping system malfunctions
- removing or installing firefighting equipment
- turret control cables
- isolating firefighting equipment turret electrical system malfunctions
- adjusting firefighting equipment turret hydraulic system components
- removing or installing firefighting pumping system valves
- disassembling or assembling firefighting pumping system valves
- removing or installing firefighting equipment turret hydraulic system components

Like the General Repair Firefighting Vehicle Mechanics, General Repair Refueling Vehicle Mechanics (GRP677, N=132) specialized on repairing one type of vehicle. Due to the nature of their work, these mechanics were physically located in the refueling vehicle maintenance shop away from shops where other mechanics worked. The General Repair Refueling Vehicle Mechanics primarily held a DAFSC of 472X1B (Special Vehicle Mechanic - Refueling Vehicles), worked only on refueling vehicles, and were the primary mechanics who repaired all types of systems on these vehicles including the refueling vehicle specific systems and equipment. Tasks which differentiated General Repair Refueling Vehicle Mechanics from other mechanics included:

- removing or installing refueling hoses
- performing refueling hose hydrostatic tests
- removing or installing refueling equipment vitaulic couplings
- calibrating refueling meters
- isolating refueling equipment dispensing system malfunctions
- inspecting refueling equipment tank mountings
- removing or installing refueling equipment filters
- disassembling or assembling refueling equipment dispensing system valves
- adjusting refueling equipment dispensing system valves
- adjusting refueling equipment hose reel components

A third distinct job type within the General Repair Mechanics cluster was Servicing Equipment Mechanics (GRP1263, N=15). Of these 15 mechanics, 11 held DAFSC 472X1D (Special Vehicle Mechanic - Towing and Servicing

Vehicles), with three members possessing DAFSC 472X0 (Base Vehicle Equipment Mechanic). Although not all their time was spent on towing and servicing vehicles, Servicing Equipment Mechanics spent more time than other General Repair Mechanics maintaining these types of vehicles. This typically involved repairing boom assemblies and maintaining the components of these assemblies. Typical tasks included:

- inspecting servicing equipment boom assemblies
- inspecting servicing equipment aerial work platforms
- adjusting servicing equipment boom assembly controls
- adjusting servicing equipment boom assembly safety devices
- removing or installing servicing equipment boom assembly components
- removing or installing servicing equipment boom assembly safety devices
- disassembling or assembling servicing equipment booster heater system components
- removing or installing servicing equipment boom assemblies

Unlike the General Repair Firefighting Vehicle Mechanics and Refueling Vehicle Mechanics, the Servicing Equipment Mechanics did not specialize on one type of vehicle. Rather, these mechanics repaired and maintained systems on base vehicles and materials handling equipment, as well as on towing and servicing vehicles.

Unit Mechanics (GRP533, N=33) were General Repair Mechanics assigned to tactical control flights, radar squadrons, detachments, or other small units. Because of the small size of their units or shops, these members had a very diverse job which involved more than just repairing vehicles. They primarily repaired general purpose vehicles and worked on fewer vehicles than other General Repair Mechanics. Additionally, some members assigned to tactical control flights wrote in comments stating they only repaired M-series vehicles. Forty-six percent of these members were General Purpose Vehicle Mechanics (AFS 472X2), with an additional 39 percent of the group holding either AFS 472X0 (Base Vehicle Equipment Mechanic), 472X1A (Special Purpose Mechanic - Firetrucks), or 472X1D (Special Purpose Mechanic - Towing and Servicing Vehicles). Tasks which differentiated Unit Mechanics from other General Repair Mechanics were related to administrative, maintenance control, and vehicle body repair functions and typically included:

- posting entries to vehicle historical record forms
(AF Form 1828)
- maintaining technical order files
- researching federal stock numbers or part number
- maintaining work control logs or work status boards
- coordinating on vehicle maintenance problems with other units or agencies
- applying lettering on identifying insignia to vehicle bodies
- determining work priorities
- preparing vehicle body surfaces for painting
- painting vehicle body surfaces

The last job identified in the cluster was Vehicle Mechanic Section Supervisors (GRP417, N=87). Compared to other General Repair Mechanics, these respondents were more senior members, with an average of 138 months TAFMS, and an average paygrade of E5. Additionally, 57 percent of the members possessed either AFSC 47271 (Special Vehicle and Base Vehicle Equipment Supervisor) or 47273 (General Purpose Vehicle and Body Maintenance Supervisor). They are "working" supervisors who supervised junior members, in addition to repairing and maintaining all types of vehicles. Due to both the supervisory and technical nature of their job, Vehicle Mechanic Section Supervisors reported performing an average of 372 tasks, 72 more than any other job group in the analysis. Their job typically included supervising and providing guidance to junior members, evaluating and inspecting the work of other mechanics, and some administrative duties, as well as the technical repair tasks. Tasks which differentiated Vehicle Mechanic Section Supervisors from other mechanics included:

- determining work priorities
- analyzing causes of vehicle failure
- preparing work assignments
- counseling personnel on personal or military matters
- interpreting policies, directives, or procedures for subordinates

Variations of the Vehicle Mechanic Section Supervisors job centered around the amount of supervision the members provided. For instance, some members spent more time supervising and performing supervisory duties and less time on technical tasks. The reverse was true for other respondents where more of their time was devoted to technical tasks and less to supervisory functions.

B. Minor Repair Firefighting Vehicle Mechanics (GRP381, N=48). Like the General Repair Firefighting Vehicle Mechanics, Minor Repair Firefighting Vehicle Mechanics specialized on repairing crash and firefighting vehicles and systems, primarily held a 472X1A DAFSC (Special Vehicle Mechanic - Firetruck), and were assigned to the firetruck maintenance shop. These mechanics, however, performed half as many tasks as General Repair Firefighting Vehicle Mechanics, indicating their job was less diverse. Differences between the two firetruck mechanic job groups were related to the type and scope of maintenance performed. General Repair Firefighting Vehicle Mechanics repaired, inspected, serviced, and maintained all systems and system components on firetrucks. Minor Repair Firefighting Vehicle Mechanics, on the other hand, concentrated on repairing and maintaining electrical systems and only performed minor repair tasks on other systems of firefighting vehicles. Typical tasks included:

- lubricating vehicles
- adjusting firefighting pump packings
- removing or installing electrical system switches
- removing or installing firefighting equipment turret control cables

isolating firefighting equipment turret electrical system malfunctions
isolating firefighting pumping system malfunctions
inspecting firefighting equipment water or foam tanks

C. Vehicle Body and Minor Repair Mechanics (GRP409, N=13). These mechanics, unlike other Vehicle Repair Mechanics, repaired and painted vehicle bodies. In addition to performing minor maintenance on vehicles, their job typically included preparing for and painting vehicles, welding and straightening metal parts, and replacing various body parts. Specific differentiating tasks performed included:

painting vehicle body surfaces
preparing vehicle body surfaces for painting
preparing paint for painting
operating cutting torches
adjusting hinges or locking mechanisms
inspecting damaged body sections
removing or installing locks or latches
straightening distorted panels, doors or fenders
welding exhaust system components
oxacetylene-welding sheet metal

Of the 13 members in this group, nine were assigned to overseas units. Mechanics in this group worked in either the base vehicle maintenance, allied trades, or general purpose maintenance shops, with 54 percent holding a 472X2 AFSC (General Purpose Vehicle Mechanic) and 31 percent possessing a 472X3 AFSC (Vehicle Body Mechanic).

D. Engine and Minor Repair Mechanics (GRP210, N=39). Compared to other Vehicle Repair Mechanics, Engine and Minor Repair Mechanics spent more of their job time maintaining vehicle engines and performed less tasks related to repairing other vehicle systems. In addition to engine maintenance, these members performed minor repair tasks mainly on vehicle electrical systems. Mechanics within this group worked mainly on general purpose vehicles, with a few members spending some time repairing base vehicles and materials handling equipment. Of this group, 44 percent of the members held a 472X2 AFS (General Purpose Vehicle Mechanic) with an additional 46 percent holding either AFS 472X0 (Base Vehicle Equipment Mechanic), 472X1C (Special Vehicle Mechanic - Materials Handling Equipment), or 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles). Distinguishing tasks for this group included:

removing or installing motor mounts
removing or installing flywheels
removing or installing engines
removing or installing head assemblies
removing or installing flywheel ring gears
isolating lubrication system malfunctions
removing or installing timing chains, belts, gears, or sprockets
removing or installing valve train component

E. Minor Repair and Administrative Personnel (GRP106, N=16). Of these 16 mechanics, nine held DAFSC 472X2 (General Purpose Vehicle Mechanic) with five members possessing a 7-skill level AFSC. These members were mechanics who spent much of their time making entries on various forms. Like other Vehicle Repair Mechanics, Minor Repair and Administrative Personnel performed minor maintenance on vehicles although they spent little time actually repairing the vehicle. Tasks which differentiated this group from other mechanics included:

- posting entries to operator's inspection guide and trouble report forms
- posting entries to vehicle and equipment work order forms (AF Form 1823)
- posting entries to minor maintenance work order forms (AF Form 1827)
- researching federal stock numbers or part numbers

F. Refueling Vehicle Equipment Mechanics (GRP141, N=38). These mechanics were assigned to refueling vehicle maintenance shops, primarily possessed DAFSC 472X1B (Special Vehicle Mechanic - Refueling Vehicles), and specialized on repairing equipment specific to refueling vehicle. Compared to the General Repair Refueling Vehicle Mechanics who maintained all the different systems on refueling vehicles, Refueling Vehicle Equipment Mechanics repaired only the refueling vehicle specific equipment, with only a small amount of time spent on minor maintenance of other vehicle systems. Representative tasks performed included:

- removing or installing refueling hoses
- performing refueling hose hydrostatic tests
- removing or installing refueling equipment vitaulic couplings
- calibrating refueling meters
- removing or installing refueling equipment filters
- performing static ground reel continuity tests
- adjusting refueling equipment hose reel components
- inspecting refueling equipment tank mountings

Within this group a supervisory job type was identified. Refueling Vehicle Equipment Section Supervisors (GRP184, N=19), in addition to repairing refueling vehicle equipment, supervised the work of mechanics within the refueling vehicle shops. Typically included in their job were administrative and supervisory tasks such as:

- determining work priorities
- maintaining work control logs or work status boards
- posting entries to vehicle and equipment work order forms (AF Form 1823)
- posting entries to vehicle historical record forms (AF Form 1828)
- posting entries to refueling equipment host installation and hydrostatic test data record forms (AF Form 1830)
- posting entries to refueling equipment inspection data record forms (AF Form 1829)

supervising special vehicle mechanics-refueling vehicle
(AFSC 47251B)
preparing APRs

II. QUALITY ASSURANCE PERSONNEL (GRP048, N=74). Quality Assurance Personnel did not repair or maintain vehicles; rather, they had a relatively specialized job which involved inspecting vehicle systems, parts, and components. Of this group, 35 percent possessed AFS 472X2 (General Purpose Vehicle Mechanic) with 45 percent holding AFSC 47271 (Special Vehicle and Base Vehicle Equipment Supervisor) or 47273 (General Purpose Vehicle and Body Maintenance Supervisor). Tasks they performed included:

- conducting vehicle quality control inspections
- inspecting lighting systems
- inspecting starting systems
- inspecting drive shaft components
- inspecting suspension systems components
- inspecting charging systems

Two jobs, Quality Control Inspectors (GRP257, N=26) and Diagnostic Inspectors (GRP253, N=39), were identified within this cluster. Quality control Inspectors mainly inspected parts, systems, and components of vehicles. Diagnostic Inspectors not only inspected vehicles, but also diagnosed vehicle problems through isolating system malfunctions and analyzing causes of failure within vehicles. Typical tasks which differentiated the Diagnostic Inspectors from the Quality Control Inspectors included:

- isolating starter system malfunctions
- analyzing causes of vehicle failures
- isolating lighting system malfunctions
- isolating charging system malfunctions
- isolating air brake system malfunctions

III. TIRE SHOP PERSONNEL (GRP027, N=71). Unlike the Vehicle Repair Mechanics, Tire Shop Personnel spent 51 percent of their time repairing tires, with very little time spent on repairing or maintaining vehicle parts or systems. Comprised primarily of 3- and 5-skill level 472X2 DAFSC (General Purpose Vehicle Mechanic) personnel, these members performed a relatively low number of tasks (34), reflecting a narrow job involving repairing and servicing tires on all types of vehicles. Typical tasks performed by Tire Shop Personnel included:

- inspecting tires for serviceability
- dismounting or mounting light or heavy duty tires
- leak testing tires or tubes
- cold patching tubes
- removing or installing valve stems
- plugging tires
- performing tire bubble balancing

Within this group, variations of the basic job were found. Some members did nothing more than repair tires, while others spent some of their job time on servicing, inspecting, testing, or charging batteries. Other respondents posted entries to forms and researched stock or part numbers, in addition to repairing tires. Finally, a few Tire Shop Personnel also performed some minor repair tasks, such as servicing air cleaners, batteries, oil systems, or drive belts.

IV. VEHICLE BODY REPAIR PERSONNEL (GRP057, N=216). The job of Vehicle Body Repair Personnel is distinctly different from any other mechanic job identified in the job structure analysis. Comprised mostly of 3- or 5-skill level 472X3 DAFSC (Vehicle Body Mechanic) personnel who work in the allied trades shop, members of this group do not spend time repairing any of the various vehicle systems. Rather, their primary job involved repairing the bodies of all types of vehicles. This includes preparing for and painting the vehicle; adjusting, straightening, replacing, and repairing vehicle body parts; repairing and replacing upholstery; installing glass; and welding various metals. Specific tasks performed included:

- inspecting damaged body sections
- painting vehicle body surfaces
- applying lettering or identifying insignias to vehicle bodies
- applying body fillers
- operating cutting torches
- straightening distorted panels, doors or fenders
- removing or installing metal body parts
 - such as doors, fenders, or floors
- arc-welding mild steel

Within the Vehicle Body Repair Personnel group, two different jobs were identified. The Vehicle Body Repair Workers (GRP767, N=142) spent 66 percent of their time repairing and painting vehicle bodies. Additionally, these respondents performed metal working tasks including operating cutting torches, welding various metals, and heat straightening bent or twisted metal parts. Vehicle Body Repair Section Supervisors (GRP797, N=48), on the other hand, had a broader job performing supervisory duties, in addition to repairing vehicle bodies.

V. MANAGERIAL AND SUPERVISORY PERSONNEL (GRP036, N=381). The 381 members in this group are primarily responsible for supervising and managing vehicle maintenance activities. These respondents were senior in grade (E-6 or E-7), TAFMS (average of 202 months), and experience level (mostly 7- or 9-skill levels, with some 47200 CEM code personnel), with 86 percent of them supervising one or more individuals. The Managerial and Supervisory Personnel job typically included evaluating, supervising, and directing personnel or programs plus implementing, organizing, and planning work. Representative tasks for this group included:

participating in meetings, such as staff meetings, briefings, conferences, or workshops
counseling personnel on personal or military matters
preparing APRs
determining work priorities
interpreting policies, directives, or procedures
for subordinates

The main differences between the seven separate jobs within the Managerial and Supervisory Personnel group were related to either the level of management at which the members performed or the degree of supervision which the members provided. Vehicle Maintenance Superintendents (GRP1090, N=82) were at a level of management where they were involved with the overall operation of vehicle maintenance facilities. The job of these members included tasks such as:

developing self-inspecting programs
indorsing airmen performance reports (APR)
establishing organizational policies, operating instruction (OI) or standing operating procedures (SOP)
implementing quality control standards
determining requirements for space, personnel, equipment, or supplies

The Vehicle Maintenance Managers (GRP161, N=15) were at a higher level of management where they were involved with staff level responsibilities. Members of three of the job groups, Support Section NCOICs (GRP1121, N=25), Maintenance Control NCOICs (GRP480, N=20), and Maintenance Shop NCOICs (GRP260, N=55) performed jobs where they were responsible for the overall administration and management of the various vehicle maintenance shops. First-Line Supervisors (GRP176, N=53), on the other hand, supervised and directed junior personnel while also performing some technical tasks. The final group, Vehicle Maintenance Inspectors (GRP538, N=14), were responsible for evaluating and inspecting the performance of various vehicle maintenance units.

VI. MAINTENANCE CONTROLLERS (GRP082, N=41). The members of this group performed a relatively low number of tasks (26) which reflected the narrow scope of their job. The job these members performed appears to be similiar to part of the job performed by DAFSC 472X4 (Vehicle Maintenance Control and Analysis) personnel. Basically, Maintenance Controllers scheduled work to be performed and maintained records of the work completed. This typically involves making entries on numerous forms and records, along with performing maintenance control and administrative functions, such as:

maintaining work control logs or work status boards
posting entries to vehicle historical record forms (AF Form 1828)
reviewing vehicle historical record data for warranty
scheduled maintenance, or repetitive maintenance

scheduling vehicle inspections
posting entries to vehicle and equipment work order
forms (AF Form 1923)
determining work priorities

Forty-four percent of these members were general purpose Vehicle Mechanics (AFS 472X2) with an additional 27 percent possessing a 7-skill level.

VII. TRAINING PERSONNEL (GRP019, N=83). The primary job of Training Personnel involved conducting and monitoring the training of Vehicle Maintenance Personnel in both on-the-job and resident training programs. Of the group, 52 percent possessed a 7-skill level and 27 percent were General Purpose Vehicle Mechanics (AFS 472X2). Tasks representative of all members in this group included:

administering tests
preparing lesson plans
counseling trainees on training progress
maintaining training records, charts or graphs
scoring tests

Differences between the two jobs found within the Training Personnel group centered around the type of training being administered or monitored. Unit Training Monitors (GRP276, N=31) were involved with on-the-job training (OJT) programs and performed tasks related specifically to this type of training, such as:

directing or implementing OJT programs
determining OJT training requirements
evaluating OJT trainers or trainees

Sixteen of the 19 Technical Training Instructors (GRP259, N=19) possessed a T-prefix and were assigned to the Chanute Technical Training Center. These members performed tasks related to resident training which included:

conducting resident course classroom training
evaluating training progress of classroom students
evaluating training material

Comparison of Job Groups

The Vehicle Maintenance jobs identified vary in many respects (size of group, tasks performed, experience, DAFSC, etc.). Table 5 summarizes selected types of information about the individuals in each job group. As shown in this table, a large portion of the respondents (68 percent) grouped together in the Vehicle Repair Mechanics functional group, with over half of these members falling into the General Repair Mechanics cluster. This indicates a large degree of commonality between the technical jobs of Vehicle Maintenance personnel.

In terms of number of tasks performed, respondents within the General Repair Mechanics cluster performed more tasks (average of 238 tasks) than members in other job groups. This indicates that General Repair Mechanics, compared to other groups in the study, had a very broad job. Within this cluster, Vehicle Mechanic Section Supervisors performed an average of 372 tasks, which suggests they are doing a full range of technical tasks as well as supervisory tasks. On the other hand, Tire Shop Personnel, Maintenance Controllers, and Training Personnel performed a relatively low number of tasks (34, 26, and 22, respectively) reflecting the narrow scope of their jobs.

A review of DAFSC data for the job groups showed many of the groups containing a mix of personnel with 472X0 (Base Vehicle Equipment Mechanic), 472X1C (Special Vehicle Mechanic - Materials Handling Equipment), 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles), and 472X2 (General Purpose Vehicle Mechanic), indicating a large degree of commonality between the technical jobs of personnel with these DAFSCs. Other job groups, such as the General Repair Firefighting Vehicle Mechanics, Refueling Vehicle Equipment Mechanics, and the Vehicle Body Repair Personnel, were composed almost entirely of either 472X1A (Special Vehicle Mechanic - Firetrucks), 472X1B (Special Vehicle Mechanic - Refueling Vehicles), or 472X3 (Vehicle Body Mechanic) DAFSC personnel, indicating some distinct differences in the jobs of members holding these DAFSCs.

Table 6 summarizes job attitudes for members of Vehicle Maintenance jobs. In terms of job interest, most groups have a high percentage of members who feel their work is interesting. General Repair Firefighting Vehicle Mechanics and Refueling Vehicle Equipment Section Supervisors generally have the highest percentage. Servicing Equipment Mechanics, Minor Repair and Administrative Personnel, and Tire Shop Personnel have the lowest percentages of those finding their job interesting.

In response to questions concerning how well their present job utilizes their talents and their training, most job group respondents appear to have fairly positive attitudes. Compared to other groups, Tire Shop Personnel, Minor Repair and Administrative Personnel, Vehicle Body and Minor Repair Mechanics, and Maintenance Controllers did not feel that their talents or training were well utilized in their present job. Servicing Equipment Mechanics and Unit Mechanics felt their talents were well utilized, but their training was not.

In terms of reenlistment intentions, the job groups varied considerably. Minor Repair and Administrative Personnel did not find their job interesting, nor did they feel their talents and training were well utilized; but 82 percent indicated they probably would reenlist. The reverse was true for the Minor Repair Firefighting Vehicle Mechanics. Members of this group felt their job was interesting and their talents and training were well utilized, but only 44 percent indicated they would reenlist. Tire Shop Personnel, on the other hand, felt that their talents and training were not well utilized, did not find their jobs interesting, and only 45 percent said they would reenlist.

Clustering By Vehicles Maintained

To further explore differences in the type of vehicles maintained between members in the different specialties, a special analysis was accomplished. The primary product used in this analysis was a hierarchical clustering based on the similarity of vehicles maintained and the relative time spent maintaining these vehicles regardless of the tasks performed. The purpose of this analysis was to determine if differences occurred between members based solely on the vehicles they maintained.

The overall results of this analysis can be summarized as follows:

1. A group composed mostly of General Purpose Vehicle Mechanics (AFS 472X2) was identified. Members of this group worked primarily on general purpose vehicles, with very little time spent on other types of vehicles.
2. A group of Firetruck mechanics was found. This group was composed of AFS 472X1A members (Special Vehicle Mechanic - Firetrucks) who maintained firefighting vehicles and equipment, with a very small amount of time spent on general purpose vehicles.
3. The majority of AFS 472X1B members (Special Vehicle Mechanic - Refueling Vehicles) grouped together and worked exclusively on refueling vehicles.
4. There was a considerable amount of overlap between AFS 472X0 (Base Vehicle Equipment Mechanic), 472X1C (Special Vehicle Mechanic - Materials Handling Equipment), and 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles). Although there were a few small groups composed primarily of one of these AFSSs, with members specializing on one type of vehicle, the overall trend was for members in each of these AFSSs to mix together in the groups. The members in these mixed groups maintained base vehicles, materials handling equipment, and towing and servicing vehicles along with some general purpose vehicles.
5. Finally, AFS 472X3 (Vehicle Body Mechanic) and the 7-skill level personnel were found either grouping together or throughout other groups. This result was expected, since these members do not necessarily specialize on any one type of vehicle.

Discussion

The results of the JOB STRUCTURE ANALYSIS showed a large amount of commonality between the jobs of Vehicle Maintenance personnel. The majority of the members basically are mechanics whose job centers around repairing, maintaining, inspecting, and servicing systems and system components on a wide variety of different vehicles. The distinct differences identified between members were related to vehicle body repair, tire repair, quality control, and non-technical functions.

In terms of the resulting job groups, little specialization by vehicle was found. Only AFSs 472X1A (Special Vehicle Mechanic - Firetrucks) and 472X1B (Special Vehicle Mechanic - Refueling Vehicle) personnel formed distinct job groups and this was due primarily to the type of vehicle-specific equipment they maintained. Although General Purpose Vehicle Mechanics (AFS 472X2) essentially performed the same general maintenance tasks as other mechanics and grouped with other mechanics, they tended to perform this maintenance primarily on general purpose vehicles. Between AFSs 472X0 (Base Vehicles Equipment Mechanic), 472X1C (Special Vehicle Mechanic - Materials Handling Equipment), and 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles), there was considerable overlap in the vehicles maintained and the tasks performed. Members in each of these three AFSs were being cross utilized, appeared to be performing whatever job had to be done, and were working on a wide variety of different vehicle types.

TABLE 4

SEVENTY-TWO TASKS PERFORMED IN COMMON BY 70 PERCENT
OR MORE OF VEHICLE REPAIR MECHANICS (GRP056)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=2,155)</u>
I288 REMOVE OR INSTALL BATTERIES	94
I308 REMOVE OR INSTALL SPARK PLUGS	94
H215 ADJUST ENGINE DRIVE BELTS	93
I268 INSPECT LIGHTING SYSTEMS	92
O522 ADJUST PARKING BRAKES	91
H244 SERVICE AIR CLEANERS	91
I266 INSPECT CHARGING SYSTEMS	91
I269 INSPECT STARTING SYSTEMS	90
I257 ADJUST IGNITION POINTS USING FEELER GAUGES	90
I287 REMOVE OR INSTALL ALTERNATORS	89
I267 INSPECT IGNITION SYSTEMS	89
I265 INSPECT BATTERIES	89
I299 REMOVE OR INSTALL IGNITION POINTS	88
I315 SERVICE BATTERIES	87
I317 SET IGNITION TIMING	86
H227 REMOVE OR INSTALL ENGINE DRIVE BELTS	86
N484 PACK WHEEL BEARINGS	85
O523 ADJUST SERVICE BRAKES	85
I282 PERFORM BATTERY HYDROMETER TESTS	85
H245 SERVICE ENGINE DRIVE BELTS	84
I297 REMOVE OR INSTALL GENERATORS OR STARTER MOTORS	84
K350 ADJUST CARBURETOR FUEL MIXTURES	84
I298 REMOVE OR INSTALL IGNITION COILS	84
L423 REMOVE OR INSTALL HEATING OR COOLING SYSTEM HOSES	84
K395 SERVICE FUEL FILTERS	83
O525 BLEED OR FLUSH BRAKE SYSTEMS	83
H246 SERVICE ENGINE OIL SYSTEMS	83
L424 REMOVE OR INSTALL RADIATORS	83
I311 REMOVE OR INSTALL VEHICLE LIGHT ASSEMBLIES	82
I279 ISOLATE STARTER SYSTEM MALFUNCTIONS	82
K378 REMOVE OR INSTALL CARBURETORS	82
H220 INSPECT MOTOR MOUNTS	81
L430 TEST STRENGTH OF ANTIFREEZE SOLUTIONS	81
I293 REMOVE OR INSTALL ELECTRICAL SYSTEM SWITCHES	81
H219 INSPECT ENGINE PARTS	81
G193 LUBRICATE VEHICLES	81
I314 REMOVE OR INSTALL VOLTAGE REGULATORS	81
I273 ISOLATE CHARGING SYSTEM MALFUNCTIONS	81
I277 ISOLATE LIGHTING SYSTEM MALFUNCTIONS	80
N499 REMOVE OR INSTALL FRONT WHEEL BEARINGS	80
I307 REMOVE OR INSTALL SOLENOIDS	80
K355 ADJUST THROTTLE LINKAGES	79

TABLE 4 (CONTINUED)

SEVENTY-TWO TASKS PERFORMED IN COMMON BY 70 PERCENT
OR MORE OF VEHICLE REPAIR MECHANICS (GRP056)

TASKS	PERCENT MEMBERS PERFORMING (N=2,155)
H249 TEST CYLINDER COMPRESSION IN GASOLINE ENGINES	79
0545 REMOVE OR INSTALL BRAKE SHOES	78
I303 REMOVE OR INSTALL PRESSURE SENDING UNITS	77
N480 INSPECT DRIVE SHAFT COMPONENTS	77
I270 INSPECT WARNING SYSTEMS	77
M433 ADJUST CLUTCH PEDAL FREE PLAY	77
I264 CHARGE BATTERIES	77
L426 REMOVE OR INSTALL WATER PUMPS	76
L428 SERVICE COOLING SYSTEMS	76
L404 FLUSH COOLING SYSTEMS	76
N497 REMOVE OR INSTALL DRIVE SHAFTS	75
N474 ADJUST WHEEL BEARINGS	75
0521 ADJUST MECHANICAL BRAKE LINKAGE OR CABLES	75
I316 SERVICE BATTERY CARRIER ASSEMBLIES	73
0529 INSPECT HYDRAULIC BRAKE SYSTEM COMPONENTS	73
C110 ROAD-TEST VEHICLES	72
N500 REMOVE OR INSTALL GREASE SEALS	72
0544 REMOVE OR INSTALL BRAKE HOSES OR LINES	72
I310 REMOVE OR INSTALL VEHICLE GAUGE PANEL UNITS	71
I283 PERFORM BATTERY LOAD TESTS	71
I290 REMOVE OR INSTALL DISTRIBUTORS	71
I256 ADJUST IGNITION POINTS USING DWELL METERS	71
H216 ADJUST VALVE CLEARANCES	71
I276 ISOLATE IGNITION SYSTEM MALFUNCTIONS OTHER THAN ELECTRONIC IGNITION SYSTEMS	71
0552 REMOVE OR INSTALL WHEEL CYLINDERS	70
K385 REMOVE OR INSTALL EXHAUST SYSTEM COMPONENTS	70
H228 REMOVE OR INSTALL ENGINES	70
0549 REMOVE OR INSTALL MASTER CYLINDERS	70
I309 REMOVE OR INSTALL TERMINAL BLOCKS, FUSE HOLDERS, RESISTORS, OR CIRCUIT BREAKERS	70
L419 REMOVE OR INSTALL COOLING SYSTEM THERMOSTATS	70

TABLE 5

BACKGROUND INFORMATION FOR GROUPS WITHIN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP

GENERAL REPAIR MECHANICS									
VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP (GRP056)	GENERAL REPAIR MECHANICS CLUSTER* (GRP403)	GENERAL REPAIR FIREFIGHTING VEHICLE MECHANICS JOB TYPE** (GRP1043)	GENERAL REPAIR REFUELING EQUIPMENT MECHANICS JOB TYPE** (GRP677)	SERVICING VEHICLE MECHANICS JOB TYPE** (GRP1263)	UNIT MECHANICS JOB TYPE** (GRP533)	MECHANICS JOB TYPE** (GRP1263)	UNIT MECHANICS JOB TYPE** (GRP533)	VEHICLE MECHANIC SECTION SUPERVISORS JOB TYPE** (GRP417)	VEHICLE MECHANIC SECTION SUPERVISORS JOB TYPE** (GRP417)
NUMBER IN GROUP:	2,155	1,480	97	132	15	33	87		
AVERAGE NUMBER OF TASKS PERFORMED:	196	238	300	235	230	179	372		
AVERAGE PAYGRADE:	E-4	E-4	E-4	E-4	E-3/E-4	E-4/E-5	E-5		
PERCENT LOCATED OVERSEAS:	36%	41%	40%	27%	52%	45%			
 DAFSC DISTRIBUTION:									
47230/47250	15%	16%	2%	1%	20%	15%			
47231A/47251A	8%	7%	1%	1%	-	12%	4%		
47231B/47251B	8%	9%	1%	1%	-	3%	2%		
47231C/47251C	10%	10%	1%	1%	-	-	2%		
47231D/47251D	9%	10%	1%	3%	-	12%	1%		
47232/47252	39%	37%	-	-	-	46%	21%		
47233/47253	1%	1%	-	-	-	3%	3%		
47271	6%	7%	6%	9%	7%	6%	35%		
47273	4%	3%	-	-	-	3%	22%		
PERCENT SUPERVISING:	23%	26%	33%	31%	27%	45%	71%		
AVERAGE MONTHS TAFMS:	66	67	68	72	51	94	138		
AVERAGE TIME IN CAREER FIELD (MONTHS):	54	57	52	60	37	75	116		
PERCENT IN FIRST ENLISTMENT:	51%	51%	41%	52%	60%	18%	9%		

*INCLUDED IN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP (GRP056)

**INCLUDED IN THE GENERAL REPAIR MECHANICS CLUSTER (GRP403)

TABLE 5 (CONTINUED)

BACKGROUND INFORMATION FOR GROUPS WITHIN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP

		REFUELING VEHICLE EQUIPMENT MECHANICS	
VEHICLE BODY AND REPAIR	MINOR REPAIR AND FIREFIGHTING	ENGINE AND MINOR REPAIR	MINOR REPAIR AND REFUELING VEHICLE EQUIPMENT SECTION SUPERVISORS
VEHICLE MECHANICS INDEPENDENT	VEHICLE MECHANICS INDEPENDENT	ADMIN PERSONNEL	ADMIN PERSONNEL
JOB TYPE*	JOB TYPE*	INDEPENDENT INDEPENDENT	INDEPENDENT INDEPENDENT
(GRP361)	(GRP409)	(GRP210)	(GRP106)
NUMBER IN GROUP:	48	13	39
AVERAGE NUMBER OF TASKS PERFORMED:	154	141	106
AVERAGE PAYGRADE:	I-3/E-4	E-3/E-4	E-3
PERCENT LOCATED OVERSEAS:	38%	69%	33%
DAFSC DISTRIBUTION:	2%	8%	13%
47230/47250	-	-	-
47231A/47251A	-	5%	-
47231B/47251B	-	-	31%
47231C/47251C	4%	-	53%
47231D/47251D	2%	-	5%
47232/47252	2%	54%	6%
47233/47253	2%	31%	6%
47271	11%	-	5%
47273	-	-	13%
PERCENT SUPERVISING:	10%	15%	13%
AVERAGE MONTHS TAKES:	54	60	46
AVERAGE TIME IN CAREER FIELD (MONTHS):	34	51	34
PERCENT IN FIRST ENLISTMENT:	56%	31%	69%

* INCLUDED IN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP (GRP056)
** INCLUDED IN THE REFUELING VEHICLE EQUIPMENT MECHANICS CLUSTER (GRP141)

TABLE 5 (CONTINUED)

BACKGROUND INFORMATION FOR CLUSTERS AND INDEPENDENT JOB TYPES

	QUALITY ASSURANCE PERSONNEL (GRP048)	TIRE SHOP PERSONNEL (GRP027)	VEHICLE BODY REPAIR PERSONNEL (GRP057)	MANAGERIAL AND SUPERVISORY PERSONNEL (GRP036)	MAINTENANCE CONTROLLERS (GRP082)	TRAINING PERSONNEL (GRP019)
NUMBER IN GROUP:	74	71	216	381	41	83
AVERAGE NUMBER OF TASKS PERFORMED:	61	34	59	76	26	22
AVERAGE PAYGRADE:	E-5	E-3/E-4	E-4	E-6/E-7	E-4/E-5	E-5/E-6
PERCENT LOCATED OVERSEAS:	34%	28%	36%	39%	42%	13%
DAFSC DISTRIBUTION:						
47230/47250	12%	14%	1%	1%	12%	10%
47231A/47251A	1%	1%	1%	1%	-	1%
47231B/47251B	-	-	-	1%	-	-
47231C/47251C	3%	3%	1%	1%	2%	5%
47231D/47251D	3%	7%	5%	1%	10%	5%
47232/47252	35%	64%	5%	8%	44%	27%
47233/47253	1%	3%	2%	-	2%	-
47271	27%	1%	1%	33%	15%	31%
47273	18%	7%	2%	31%	12%	21%
47299	-	-	-	15%	-	-
OTHER	-	-	-	-	8%	-
PERCENT SUPERVISING:	57%	24%	30%	86%	20%	10%
AVERAGE MONTHS TAFMS:	140	68	69	202	104	156
AVERAGE TIME IN CAREER FIELD (MONTHS):	115	60	54	177	81	135
PERCENT IN FIRST ENLISTMENT:	11%	52%	45%	1%	41%	10%

TABLE 6

JOB SATISFACTION INDICATORS FOR GROUPS WITHIN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP
(PERCENT RESPONDING)***

		GENERAL REPAIR MECHANICS					
		GENERAL REPAIR	REPAIR	REFUELING	SERVICING	UNIT MECHANICS	JOB TYPE** (GRP533)
FUNCTIONAL GROUP	CLUSTER*	GENERAL MECHANICS	VEHICLE MECHANICS	VEHICLE MECHANICS	EQUIPMENT MECHANICS	MECHANICS	JOB TYPE** (GRP1263)
VEHICLE REPAIR MECHANICS CLUSTER	JOB TYPE** (GRP403)	(GRP403)	(GRP1043)	(GRP677)	(GRP1263)	(GRP533)	(GRP417)
<u>EXPRESSED JOB INTEREST:</u>							
DULL	9	8	2	8	7	12	7
SO-SO	16	16	4	9	40	24	17
INTERESTING	74	76	93	83	47	64	75
<u>PERCEIVED UTILIZATION OF TALENTS:</u>							
LITTLE OR NOT AT ALL	15	12	4	10	20	30	12
FAIRLY WELL OR BETTER	85	88	95	89	80	70	87
<u>PERCEIVED UTILIZATION OF TRAINING:</u>							
LITTLE OR NOT AT ALL	19	16	5	8	33	39	16
FAIRLY WELL OR BETTER	80	83	93	90	67	58	83
<u>REENLISTMENT INTENTIONS:</u>							
PLAN TO RETIRE	3	3	2	2	-	3	9
PLAN NOT TO REENLIST	40	40	34	39	40	30	20
PLAN TO REENLIST	56	56	62	57	60	64	68

* INCLUDED IN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP (GRP056)

** INCLUDED IN THE GENERAL REPAIR MECHANICS CLUSTER (GRP403)

*** SOME COLUMNS DO NOT TOTAL 100% DUE TO OMITTED RESPONSES

TABLE 6 (CONTINUED)

JOB SATISFACTION INDICATORS FOR GROUPS WITHIN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP
(PERCENT RESPONDING)***

		REFUELING VEHICLE EQUIPMENT MECHANICS			
		VEHICLE BODY	ENGINE AND	MINOR REPAIR AND	REFUELING VEHICLE EQUIPMENT SECTION
		MINOR REPAIR AND FIREFIGHTING VEHICLE MECHANICS INDEPENDENT JOB TYPE*	MINOR REPAIR MECHANICS INDEPENDENT JOB TYPE*	ADMIN PERSONNEL INDEPENDENT JOB TYPE*	VEHICLE EQUIPMENT MECHANIC CLUSTER* (GRP141)
		(GRP381)	(GRP409)	(GRP210)	(GRP106)
<u>EXPRESSED JOB INTEREST:</u>					
DULL	8	8	10	13	5
SO-SO	8	15	13	31	8
INTERESTING	81	77	74	56	-
				87	95
<u>PERCEIVED UTILIZATION OF TALENTS:</u>					
LITTLE OR NOT AT ALL	10	31	15	44	18
FAIRLY WELL OR BETTER	90	69	82	56	82
					95
<u>PERCEIVED UTILIZATION OF TRAINING:</u>					
LITTLE OR NOT AT ALL	21	31	10	44	5
FAIRLY WELL OR BETTER	79	69	85	56	95
					95
<u>REENLISTMENT INTENTIONS:</u>					
PLAN TO RETIRE	2	-	3	13	3
PLAN NOT TO REENLIST	54	38	41	-	45
PLAN TO REENLIST	44	62	54	82	52
					58

* INCLUDED IN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP (GRP06)

** INCLUDED IN THE REFUELING VEHICLE EQUIPMENT MECHANIC CLUSTER (GRP141)

*** SOME COLUMNS DO NOT TOTAL 100% DUE TO OMITTED RESPONSES

TABLE 6 (CONTINUED)

JOB SATISFACTION INDICATORS FOR CLUSTERS AND INDEPENDENT JOB TYPES
(PERCENT RESPONDING)*

	QUALITY ASSURANCE PERSONNEL (GRP048)	TIRE SHOP PERSONNEL (GRP027)	VEHICLE BODY REPAIR PERSONNEL (GRP057)	MANAGERIAL AND SUPERVISORY PERSONNEL (GRP036)	MAINTENANCE CONTROLLERS (GRP082)	TRAINING PERSONNEL (GRP019)
<u>EXPRESSED JOB INTEREST:</u>						
BULL	14	23	8	4	12	11
SO-SO	20	24	17	9	17	8
INTERESTING	66	51	75	85	68	78
<u>PERCEIVED UTILIZATION OF TALENTS:</u>						
LITTLE OR NOT AT ALL FAIRLY WELL OR BETTER	20 80	39 58	13 87	12 88	29 68	12 87
<u>PERCEIVED UTILIZATION OF TRAINING:</u>						
LITTLE OR NOT AT ALL FAIRLY WELL OR BETTER	22 77	48 51	18 82	12 86	44 49	16 83
<u>REENLISTMENT INTENTIONS:</u>						
PLAN TO RETIRE	16	7	2	33	5	27
PLAN NOT TO REENLIST	22	45	41	10	22	10
PLAN TO REENLIST	62	45	57	55	68	61

*SOME COLUMNS DO NOT TOTAL 100% DUE TO OMITTED RESPONSES

DAFSC AND AFR 39-1 ANALYSES

As the JOB STRUCTURE section of this report illustrates, Vehicle Maintenance personnel performed many similar technical tasks regardless of the vehicles they maintained. Additionally, many personnel maintained a variety of vehicles outside the range of their own Air Force Specialty (AFS). Discussion of the Vehicle Repair Mechanics functional area in the JOB STRUCTURE highlighted the common technical areas of vehicle maintenance. The following will first examine the commonality and differences between the 3- and 5-skill level personnel in AFSs 472X0 (Base Vehicle Equipment Mechanic), 472X1A/B/C/D (Special Vehicle Mechanic), and 472X2 (General Purpose Vehicle Mechanic) in terms of vehicles maintained and tasks and jobs performed. Since the job of DAFSCs 47233/53 members (Vehicle Body Mechanic) is distinctly different from that of other Vehicle Maintenance personnel, these members will be discussed separately. The tasks and jobs performed by 7-skill level personnel (DAFSCs 47271 - Special Vehicle and Base Vehicle Equipment Supervisor and 47273 - General Purpose Vehicle and Body Maintenance Supervisor) will then be examined, followed by a discussion of the 9-skill level (DAFSC 47299 - Vehicle Maintenance Superintendent) and CEM Code 47200 (Vehicle Maintenance Manager) personnel. Finally, the information gained from examining DAFSC groups will be used to analyze AFR 39-1 Specialty Job Descriptions for accuracy.

3- and 5-Skill Level 472X0 (Base Vehicle Equipment Mechanic), 472X1A/B/C/D (Special Vehicle Mechanic) and 472X2 (General Purpose Vehicle Mechanic)

Within the Vehicle Maintenance career field, six AFSs (or shredouts) are classified at the 3- and 5-skill level according to specialization by type vehicle maintained. For purposes of clarity, the six vehicle-specific AFSs with their respective titles are:

- 47230/50-Base Vehicle Equipment Mechanic
- 47231A/51A-Special Vehicle Mechanic, Firetrucks
- 47231B/51B-Special Vehicle Mechanic, Refueling Vehicles
- 47231C/51C-Special Vehicle Mechanic, Materials Handling Equipment
- 47231D/51D-Special Vehicle Mechanic, Towing and Servicing Vehicles
- 47232/52-General Purpose Vehicle Mechanic

Almost all members in each of these DAFSCs performed basically a technical job, with very little of their job time being devoted to supervisory or managerial duties. The job of members in each of these AFSs involved repairing, maintaining, inspecting, and servicing systems and system components on various types of vehicles and equipment. Commonality between the different DAFSCs occurred in the nonvehicle-specific tasks performed with overlap between some DAFSC members on the vehicles maintained.

Vehicles Maintained. As shown in Tables 7 through 9, DAFSCs 47230/50 (Base Vehicle Equipment Mechanic), 47231C/51C (Special Vehicle Mechanic-Materials Handling Equipment), and 47231D/51D (Special Vehicle

Mechanic - Towing and Servicing Vehicles) members do not specialize to the extent implied in their specialty descriptions. Members in all three of the AFSs maintained and repaired base vehicles, materials handling equipment, towing and servicing vehicles and some of the general purpose vehicles. This lack of specialization shows a substantial amount of overlap in the vehicles maintained by members in these three specialties, with members repairing not only the vehicles for which they are responsible, but also vehicles which are the responsibility of members in other vehicle maintenance specialties. For a further discussion of the overlap, see the next section of this report.

Members in DAFSCs 47231A/51A (Special Vehicle Mechanic - Firetrucks), 47231B/51B (Special Vehicle Mechanic - Refueling Vehicles), and 47232/52 (General Purpose Vehicle Mechanic) were specializing on vehicles consistent with their specialty descriptions. As illustrated in Table 9, DAFSC 47231A/51A members (Special Vehicle Mechanics - Firetrucks) were the primary mechanics who maintained firefighting vehicles and related equipment. In addition, Tables 7 through 9 show that, except for firetrucks and pickup trucks, very few of these members maintained any other type of vehicles. This specialization also holds true for DAFSCs 47231B/51B members (Special Vehicle Mechanic - Refueling Vehicles). As displayed in Table 9, DAFSC 47231B/51B members (Special Vehicle Mechanic - Refueling Vehicles) maintained refueling vehicles and equipment and were the primary mechanics who did so. Very few of these members repaired or maintained any other types of vehicles, as shown in Tables 7 through 9. Finally, DAFSC 47232/52 members (General Purpose Vehicle Mechanic) are responsible for maintaining general purpose vehicles and, as shown in Tables 7 through 9, mainly repaired these types of vehicles. The general purpose vehicles, however, were repaired not only by DAFSCs 47232/52 members (General Purpose Vehicle Mechanic), but were also maintained by members in other vehicle maintenance specialties.

Tasks Performed. Commonality between the mechanics in the various vehicle maintenance DAFSCs (excluding the 47233/53 - Vehicle Body Mechanics) occurs not only on the vehicles maintained, but also on the tasks performed. AFSs 472X0 (Base Vehicle Equipment Mechanic), 472X1A/B/C/D (Special Vehicle Mechanic) and 472X2 (General Purpose Vehicle Mechanic) performed a common core of technical tasks applicable to all types of vehicles. As shown in Table 10, members in each of the DAFSCs spend the majority of their job time in duties relating to systems or equipment common to all types of vehicles.

In terms of differentiating tasks, Tables 11 through 15 present vehicle-specific tasks and the percent of 3- and 5-skill level members in each AFS performing these tasks. For DAFSC 47230/50 (Base Vehicle Equipment Mechanic), and 47231D/51D (Special Vehicle Mechanic - Towing and Servicing Vehicles) personnel, Tables 11 and 15 show few members performing tasks related to the vehicles for which they are responsible. In fact, the tasks in these two tables relating specifically to base vehicles and towing and servicing vehicles are not performed to any large degree by any AFS. Larger percentages of incumbents in AFSs 472X0 (Base Vehicle Equipment Mechanic) and 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles) are performing tasks appropriate to their specialty than are incumbents of other specialties. In some cases, more AFSs 472X0 (Base Vehicle Equipment Mechanic) and 472X1D (Special Vehicle Mechanic - Towing

and Servicing Vehicles) are performing tasks belonging to other specialties than are performing their own equipment-specific tasks. Some of the same trends on vehicle-specific tasks occurred for DAFSC 47231C/51C (Special Vehicle Mechanic - Materials Handling Equipment). These respondents performed a number of more specialized tasks related to materials handling equipment (see Table 14) and were the primary mechanics performing these tasks. The specialized materials handling equipment tasks, however, were not the main concentration of DAFSCs 47231/51C (Special Vehicle Mechanic - Materials Handling Equipment) job.

DAFSCs 47231A/51A (Special Vehicle Mechanic - Firetrucks) and 47231B/51B (Special Vehicle Mechanic - Refueling Vehicles) performed, along with the common vehicle maintenance tasks, vehicle-specific tasks which differentiated them from other vehicle mechanics. As shown in Table 12, a large percentage of Firetruck Mechanics (DAFSCs 47231A/51A) performed firefighting vehicle-specific tasks, with these tasks not being performed by members in any other vehicle maintenance specialty. The same was true for Refueling Vehicle Mechanics (DAFSCs 47231B/51B). Table 13 reveals that only these members are performing refueling vehicle-specific tasks. In conjunction with this, Table 10 shows Firetruck (DAFSCs 47231A/51A) and Refueling Vehicle (DAFSCs 47231B/51B) mechanics spending more of their job time than other mechanics in duty areas related to the vehicles for which they are responsible.

Finally, General Purpose Mechanics (DAFSCs 47232/52) did not perform any tasks which distinguished them from other vehicle mechanics. As shown in Table 10, these mechanics' job time is spent in duties relating to systems or equipment common to all types of vehicles.

Jobs Performed. The same degree of commonality between DAFSCs which exists on vehicles and tasks performed also occurs in the jobs performed. Table 17 shows the majority of 3- and 5-skill level members in AFSs 472X0 (Base Vehicle Equipment Mechanic), 472X1A/B/C/D (Special Vehicle Mechanic) and 472X2 (General Purpose Vehicle Mechanic) grouping together in the Vehicle Repair Mechanics functional area. Within this functional area, separate job groups composed almost entirely of DAFSC 47231A/51A (Special Vehicle Mechanic - Firetrucks) were identified. Specifically, as shown in Table 17, the General Repair Firefighting Vehicle Mechanics and Minor Repair Firefighting Vehicle Mechanics job groups contained the majority of DAFSC 47231A/51A (Special Vehicle Mechanic - Firetrucks) incumbents. The same was true for DAFSC 47231B/51B personnel (Special Vehicle Mechanic - Refueling Vehicles). These members were concentrated in the General Repair Refueling Vehicle Mechanics and Refueling Vehicle Equipment Mechanics job groups (see Table 17). For DAFSC 47230/50 (Base Vehicle Equipment Mechanics), 47231C/51C (Special Vehicle Mechanics - Materials Handling Equipment), 47231D/51D (Special Vehicle Mechanic - Towing and Servicing Vehicles), and 47232/52 (General Purpose Vehicle Mechanic), there were no distinct job groups identified which contained only members of one of these AFSs. The majority of these members grouped together in the General Repair Mechanics Cluster (see Table 17).

AFR 39-1 Specialty Job Descriptions. The June 1977 Specialty Job Descriptions for AFSCs 47210/30/50 (Base Vehicle Equipment Mechanic), 47211/31/51 (Special Vehicle Mechanic) and 47212/32/52 (General Purpose Vehicle Mechanic) were reviewed for accuracy of content. Each of these specialty job descriptions describes the general maintenance tasks performed by members in each of the specialties. The vehicles maintained by members are accurate for AFSs 472X1A (Special Vehicle Mechanic - Firetrucks), 472X1B (Special Vehicle Mechanic - Refueling Vehicle), and 472X2 (General Purpose Vehicle Mechanic). For AFSs 472X0 (Base Vehicle Equipment Mechanic), 472X1C (Special Vehicle Mechanic - Materials Handling Equipment), and 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles), the specialty job descriptions did not cover all the vehicles these members maintained. To be completely accurate, each of these specialty job descriptions would have to include base vehicles and equipment, materials handling equipment, towing and servicing vehicles, and general purpose vehicles.

DAFSCs 47233/53 (Vehicle Body Mechanic)

Tasks and Jobs Performed. The Vehicle Body Mechanics (DAFSC 47233/53) have a totally different job than all other vehicle mechanics. While the AFSs 472X0 (Base Vehicle Equipment Mechanic), 472X1A/B/C/D (Special Vehicle Mechanic), and 472X2 (General Purpose Vehicle Mechanic) have a substantial degree of job overlap, DAFSC 47233/53 personnel (Vehicle Body Mechanic) have almost no job commonality with other vehicle mechanics. Vehicle Body Mechanics (DAFSCs 47233/53), as their title implies, repaired and maintained vehicle bodies. Tables 7 through 9 illustrate the fact that DAFSCs 47233/53 personnel (Vehicle Body Mechanics) maintained the bodies on a wide variety of different vehicles. Even with this range of maintenance, the average number of tasks performed by these incumbents was only 69. Many of these 69 tasks differentiated the Vehicle Body Mechanics (DAFSCs 47233/53) from other mechanics. The best tasks to illustrate this are shown in Table 16. Additionally, as shown in Table 10, these members spent a substantial portion (53 percent) of their job time repairing and painting vehicle bodies (Duty V), with an additional 18 percent of their job time performing general maintenance and metal working tasks (Duty G). Only a very small portion of other vehicle mechanics' time was spent in these duties. As could be expected in light of their unique job, the Vehicle Body Mechanics (DAFSC 47233/53) grouped separately from the other vehicle mechanics in the Job Structure Analysis with the Vehicle Body Repair Personnel Cluster containing the majority of these respondents (see Table 17).

AFR 39-1 Specialty Job Descriptions. The June 1977 AFR 39-1 Specialty Job Descriptions for AFSCs 47213, 47233, and 47253 accurately describes the job AFS 472X3 (Vehicle Body Mechanic) respondents reported performing. No areas needing revision were identified.

DAFSC 47271 (Special Vehicle and Base Vehicle Equipment Supervisors)

Tasks and Jobs Performed. The 333 respondents reporting a 47271 DAFSC (Special Vehicle and Base Vehicle Equipment Supervisor) primarily performed a non-technical job, with 55 percent of their job time spent in non-technical areas, such as supervision, management, administration, and training (see Table 10). The remaining portion of their job time was spent in the actual performance of vehicle maintenance tasks. This aspect of their job, however, is diverse with few technical tasks being performed by over half of all DAFSC 47271 (Special Vehicle and Base Vehicle Equipment Supervisor) respondents. Additionally, due to the diversity of their job, these members were found in numerous job groups with the majority being identified in the General Repair Mechanics and Managerial and Supervisory Personnel Clusters (see Table 17).

AFR 39-1 Specialty Job Description. The June 1977 AFSC 47271 Specialty Job Description accurately describes the job reported by DAFSC 47271 (Special Vehicle and Base Vehicle Equipment Supervisors) occupational survey respondents. Since their job is non-technical in nature with no specialization by vehicle, the lack of shredouts at the 7-skill level is appropriate. No areas needing revision were identified.

DAFSC 47273 (General Purpose Vehicle and Body Maintenance Supervisor)

Tasks and Job Performed. DAFSC 47273 (General Purpose Vehicle and Body Maintenance Supervisor) respondents reported a mainly non-technical job, with only 39 percent of their job time spent in technical areas of vehicle maintenance. These 7-skill levels had a very diverse job, with members identified in the General Repair Mechanics, Quality Assurance Personnel, Vehicle Body Repair Personnel, Managerial and Supervisory Personnel, Training Personnel, and other job clusters (see Table 17). Only 15 tasks (all non-technical) were identified as being performed by greater than 50 percent of all the DAFSC 47273 respondents.

Of the 280 respondents indicating DAFSC 47273 (General Purpose Vehicle and Body Maintenance Supervisors), 48 reported having progressed through the 472X3 (Vehicle Body Mechanic) ladder, while 220 came from the 472X2 (General Purpose Vehicle Mechanic) ladder. To see how previous experience affects the present job of these technicians, the group of 220 was compared to the 48 member group. Both groups reported performing mainly a non-technical job. The technical tasks that were performed, however, did differ between the groups. As shown in Table 18, the former AFS 472X3 technicians (Vehicle Body Mechanic) spent 40 percent of their job time on technical duties. Of this time, 20 percent was spent repairing and painting vehicle bodies (Duty V) and performing general maintenance and metal working tasks (Duty G). The tasks within these two duty areas were primarily performed by Vehicle Body Mechanics (AFS 472X3) as shown in Table 10. The former AFS 472X2 technicians (General Purpose Vehicle Mechanic) spent 36 percent of their time on technical tasks with only four

percent of this time spent on tasks in Duty G (Performing General Maintenance and Metal Working Tasks) and Duty V (Repairing and Painting Vehicle Bodies). Consequently, it seems that technical job performance for DAFSC 47273 technicians (General Purpose Vehicle and Body Maintenance Supervisor) is somewhat affected by prior experience. In every duty having to do with vehicle repair, as opposed to body repair, supervisors who progressed to the 7-skill level from AFS 472X3 (Vehicle Body Mechanic) spent less time than did their counterparts. Conversely, they spent more time on body repair tasks than their counterparts. The ladder from which supervisors progress, therefore, seems to affect the job utilization of the supervisors.

AFR 39-1 47275* Specialty Job Description. The October 1981 AFR 39-1 Specialty Job Description for AFSC 47275 (General Purpose Vehicle and Body Maintenance Supervisor) accurately described the non-technical aspect of the job performed by DAFSC 47275 technicians. As stated above, there was a difference in the technical job performed depending upon the members prior experience. Not all the technical duties and responsibilities described in the specialty description were performed by all DAFSC 47275 technicians (General Purpose Vehicle and Body Maintenance Supervisor). This is mainly a problem of utilization and will be discussed in more detail in the UTILIZATION OF VEHICLE MAINTENANCE PERSONNEL section of this report.

* 47275 was 47273 prior to October 1981 numerical change.

DAFSC 47299 (Vehicle Maintenance Superintendent) and
CEM Code 47200 (Vehicle Maintenance Manager)

Tasks and Job Performed. When personnel advance to the 9-skill or CEM code level, their job becomes almost totally non-technical. Managerial and supervisory functions consume most of their job time, with very little, if any, time being spent on technical tasks. Their job also is the most limited of any of the other DAFSC groups, with an average of only 67 tasks performed. Common tasks performed by these personnel included such things as "write correspondence", "participate in meetings", and "coordinate on vehicle maintenance problems". Most of the 9-skill level and all of the CEM Code respondents grouped in the Managerial and Supervisory Personnel cluster (see Table 17).

AFR 39-1 Specialty Job Description. The April 1979 AFR 39-1 for AFSC 47299 and CEM Code 47200 fairly accurately describes their job as identified by job analysis, except for two possible changes. First, paragraph c, section 2, reads "Establishes and conducts on-the-job training . . .". This might better be written "Establishes and supervises on-the-job training . . .", since only 13 percent of the AFSC 47299 (Vehicle Maintenance Superintendent) and CEM Code 47200 (Vehicle Maintenance Manager) respondents reported actually conducting on-the-job training. Additionally, "Performs technical vehicle maintenance functions" in paragraph e, section 2, might be better written "Manages technical vehicle maintenance functions", since few technical tasks are performed at this level.

TABLE 7
GENERAL PURPOSE VEHICLES MAINTAINED
(PERCENT MEMBERS MAINTAINING)

	<u>DAFSC</u> <u>47230/50</u>	<u>DAFSC</u> <u>47231/51A</u>	<u>DAFSC</u> <u>47231/51B</u>	<u>DAFSC</u> <u>47231/51C</u>	<u>DAFSC</u> <u>47231/51D</u>	<u>DAFSC</u> <u>47232/52</u>	<u>DAFSC</u> <u>47233/53</u>
AMBULANCES, TRUCKS	25	13	6	20	19	69	87
RUBBER-TIRED ARMORED PERSONNEL VEHICLES	22	12	6	18	20	63	79
TRACKED ARMORED PERSONNEL VEHICLES	19	7	6	18	37	33	49
BUSES	12	4	4	12	17	21	30
CARGO TRUCKS, 4X2	35	16	10	28	27	75	89
CARGO TRUCKS, 4X6	37	23	12	19	33	72	85
CARGO TRUCKS, 6X6	30	13	9	25	24	56	76
JEEPS	32	9	7	28	19	57	64
LOW BED TRAILERS	30	18	9	25	22	62	67
MINIBUS VEHICLES	42	10	8	30	29	65	81
PICKUP TRUCKS, 4X2	20	8	5	16	18	48	64
PICKUP TRUCKS, 4X4	43	52	20	33	41	81	92
STAFF CARS OR SEDANS	45	48	13	36	39	85	90
STEP-VAN TRUCKS	32	18	9	20	29	76	90
TRUCK-TRACTOR TRAILERS	31	17	7	29	31	73	88
TRUCK-TRACTORS, 6X4	43	34	11	38	37	72	85
TRUCK-TRACTORS, 6X6	38	22	9	26	27	59	72
TWO-WHEEL CARGO TRAILERS	31	11	8	21	23	50	65
UTILITY TRUCKS, 4X4	27	7	8	21	16	47	62
VAN TRUCKS	33	15	10	28	32	58	76
WEASELS	23	16	8	24	25	61	80
	9	5	4	6	9	17	22

TABLE 8
BASE VEHICLES AND EQUIPMENT MAINTAINED
(PERCENT MEMBERS MAINTAINING)

	<u>DAFSC 47230/50</u>	<u>DAFSC 47231/51A</u>	<u>DAFSC 47231/51B</u>	<u>DAFSC 47231/51C</u>	<u>DAFSC 47231/51D</u>	<u>DAFSC 47232/52</u>	<u>DAFSC 47233/53</u>
AIR BLAST SNOW SWEEPERS	41	6	5	19	41	12	35
AIR JET VACUUM SWEEPERS	64	7	6	31	41	13	41
AGGREGATE DRIERS	18	3	4	5	7	8	20
AGGREGATE SPREADERS	21	4	4	8	10	8	19
ASPHALT DISTRIBUTORS	43	6	5	13	24	9	26
ASPHALT SPREADERS-FINISHERS	30	5	6	10	15	10	25
BACTHOES	73	11	7	33	49	18	52
CLAMSHELL DRAGLINES	33	5	4	7	11	8	20
COAL/AGGREGATE CONVEYORS	22	4	4	6	11	8	21
COMPACTORS	36	5	4	9	14	9	22
CONCRETE MIXERS	41	4	5	16	23	10	22
CONCRETE TRAVEL MIXERS	24	3	4	10	11	8	18
CONCRETE VIBRATORS	24	4	5	8	11	9	22
CRAWLER MOUNTED DITCHERS	33	4	4	13	19	10	25
DECONTAMINATION TRUCKS	20	5	3	11	21	10	29
DIESEL LOCOMOTIVES	17	4	4	8	9	9	19
DUMP TRUCKS	70	19	9	52	66	35	82
DUMPSTERS	18	5	7	14	17	11	26
EARTH AUGERS	21	5	4	12	21	8	23
EARTH BORING AND PALE SETTING TRUCKS	26	6	3	13	22	11	28
ELECTRIC LINEMAN TRUCKS	49	13	8	32	54	10	57
FARM RIDING CONCRETE FINISHERS	19	4	4	9	12	8	21
FARM TRACTORS	76	18	10	50	67	28	74
FRONT-END LOADERS	77	11	8	37	55	19	55
GARAGE PACKERS	22	7	6	15	23	10	31
GRASS CUTTING EQUIPMENT	52	9	6	27	39	16	46
HIGH REACH MAINTENANCE TRUCKS	47	13	7	43	63	19	56
INDUSTRIAL TRACTORS	53	11	6	28	47	17	52
JOINT CLEANSERS (CONCRETE)	15	4	4	6	7	7	18
LOAD-ALLS	21	8	6	15	16	10	28
MAGNETIC SWEEPERS	56	8	5	31	43	12	35
MUD HOG PUMPS	11	3	3	5	6	7	15

TABLE 8 (CONTINUED)

BASE VEHICLES AND EQUIPMENT MAINTAINED
(PERCENT MEMBERS MAINTAINING)

	<u>DAFSC 47230/50</u>	<u>DAFSC 47231/51A</u>	<u>DAFSC 47231/51B</u>	<u>DAFSC 47231/51C</u>	<u>DAFSC 47231/51D</u>	<u>DAFSC 47232/52</u>	<u>DAFSC 47233/53</u>
MUD JACKS	10	3	2	4	5	7	15
PAINT STRIPING MACHINES	16	4	3	5	8	7	20
PILE DRIVERS	11	2	3	4	6	6	14
ROLLOVER SNOWPLOWS	41	8	4	23	34	12	35
ROTARY SCRAPERS	21	3	2	8	11	7	19
ROTARY SNOWPLOWS	37	6	3	16	24	9	29
RUBBER TIRED TRACTOR DOZERS	24	5	6	10	11	9	22
SANDSIFTERS	18	3	2	9	10	8	21
SELF-PROPELLED GRADERS	73	6	5	27	39	12	33
SELF-PROPELLED CRAWLER-MOUNTED LOADERS	39	4	4	12	18	8	21
SELF-PROPELLED ROLLERS	54	6	4	15	24	8	21
SELF-PROPELLED ROTARY SWEEPERS	42	4	3	16	23	8	21
SELF-PROPELLED SCRAPERS	26	3	3	7	6	6	17
SHEEPS FOOT ROLLERS	16	2	3	4	5	6	15
SHOVELS (CRANE, DRAGLINE, BACKHOE, OR CRAWLER MOUNTED)	45	7	4	23	34	9	32
SNOW ROLLERS	17	3	3	7	10	7	20
STREET SWEEPERS	64	11	5	35	47	16	52
STEEL-WHEEL ROLLER	45	4	3	15	23	7	20
TANDEM ROLLERS	27	3	2	7	9	6	15
TELEPHONE MAINTENANCE TRUCKS	42	13	6	35	55	28	66
TOWED ROLLERS	37	4	2	10	14	8	17
TOWED SWEEPERS	62	7	7	32	41	13	38
TRACTOR DOZERS (CRAWLERS)	70	8	7	28	37	12	34
TRUCK MOUNTED CRANES	72	12	8	41	59	18	56
TRUCK MOUNTED ROCK DRILLS	15	4	4	6	9	7	15
TRUCK MOUNTED SHOVELS (CRANES OR BACKHOES)	36	4	5	13	18	9	28
VACUUM SWEEPERS	64	8	7	35	46	15	67
WATER DISPENSING TRAILERS	38	20	5	16	17	13	34
WHEEL OR CRAWLER DITCHERS	27	4	4	8	11	8	18
WOBBLE WHEEL ROLLERS	38	3	4	7	14	8	19
WRECKERS	52	14	10	47	63	41	68

TABLE 9
SPECIAL VEHICLES MAINTAINED
(PERCENT MEMBERS MAINTAINING)

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	<u>DAFSC 47230/50</u>	<u>DAFSC 47231/51A</u>	<u>DAFSC 47231/51B</u>	<u>DAFSC 47231/51C</u>	<u>DAFSC 47231/51D</u>	<u>DAFSC 47232/52</u>	<u>DAFSC 47233/53</u>
FIREFIGHTING-EQUIPMENT AND VEHICLES							
CRASH FIRE TRUCKS	15	90	9	14	14	13	58
FORCIBLE ENTRY TRUCKS	11	73	6	5	7	18	26
RAMP FIREFIGHTING TRUCKS	11	87	6	9	11	9	39
RUNWAY FOAMER TRAILERS	12	78	6	9	11	8	36
STRUCTURE FIRE TRUCKS	15	90	7	10	14	10	45
OTHER FIRE/CRASH FIREFIGHTING VEHICLES	5	16	3	3	4	4	6
REFUELING VEHICLES AND EQUIPMENT							
A-1B FUEL TRAILERS	16	6	51	6	11	16	26
DEMINERALIZED WATER TANK TRUCKS	12	7	59	11	11	10	40
FUEL SERVICING TANK TRUCKS	15	10	91	8	14	13	46
HOSE CARTS	13	5	68	8	13	9	30
MD-3 WATER ALCOHOL TRAILERS	9	2	17	6	6	8	22
OIL SERVICING TRUCKS	10	5	23	7	7	7	26
OTHER REFUELING VEHICLES/EQUIPMENT	4	1	19	3	4	4	7
MATERIALS HANDLING EQUIPMENT							
AIRCRAFT CARGO HANDLING TRUCKS	19	8	4	43	29	10	34
BOMB HANDLING CRANES	13	5	3	19	16	6	16
CARGO LOADERS/UNLOADERS (25K)	28	8	6	75	45	12	46
CARGO LOADERS/UNLOADERS (40K)	18	6	3	59	23	9	40
CRASH RECOVERY CRANES (50 TONS)	17	4	4	19	18	7	24
DIESEL POWERED ROUGH TERRAIN FORKLIFTS	31	8	6	66	34	13	44
ELECTRIC POWERED FORKLIFTS	30	9	4	63	49	12	48
GASOLINE ENGINE POWERED TRACKLAYING FORKLIFTS	12	4	4	17	9	6	20
GASOLINE ENGINE POWERED WHEELED FORKLIFTS	45	14	8	83	57	25	63
HI-LIFT TRUCKS	24	11	5	42	43	11	42

TABLE 9 (CONTINUED)

SPECIAL VEHICLES MAINTAINED
(PERCENT MEMBERS MAINTAINING)

	DAFSC 47230/50	DAFSC 47231/51A	DAFSC 47231/51B	DAFSC 47231/51C	DAFSC 47231/51D	DAFSC 47232/52	DAFSC 47233/53
<u>MATERIALS HANDLING EQUIPMENT (CONTINUED)</u>							
MUNITIONS TRANSFER TRUCKS	10	4	4	11	9	7	18
TACTICAL CARGO LOADER/UNLOADERS (25K)	17	5	5	46	19	8	31
WAREHOUSE TRACTORS	36	10	7	64	53	19	51
OTHER MATERIALS HANDLING EQUIPMENT	4	2	2	3	3	4	5
<u>TOWING AND SERVICING VEHICLES AND EQUIPMENT</u>							
AEROSPACE GROUND EQUIPMENT TOWING EQUIPMENT	26	6	5	27	44	10	36
AIRCRAFT TOWING TRACTORS/TUGS	43	14	8	58	78	19	65
CALAVAR PLATFORM SERVICING TRUCKS	11	5	3	16	17	6	19
DEICERS OTHER THAN STANAY/REDDING	21	7	6	24	41	8	29
PLATFORM TRUCKS OTHER THAN CALAVARS	11	4	3	10	14	6	22
REDDING TECHMATIC DEICERS	13	3	2	12	23	6	17
STANAY DEICERS	12	4	4	16	20	6	17
WATER OR WASTE TANK TRUCKS	26	8	10	27	29	12	36
OTHER TOWING/SERVICING EQUIPMENT	3	1	2	5	5	5	5

TABLE 10
AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY 472XX DAPSC GROUPS

TABLE 10 (CONTINUED)
AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY 472XX DAFSC GROUPS

DUTIES	DAFSC 47230/50 (N=371)	DAFSC 47231A/51A (N=189)	DAFSC 47231B/51B (N=177)	DAFSC 47231C/51C (N=230)	DAFSC 47231D/51D (N=217)	DAFSC 47232/52 (N=1062)	DAFSC 47233/53 (N=203)	DAFSC 47271 (N=333)	DAFSC 47273 (N=280)	DAFSC 47299 (N=651)	CEN/CONE 47200 (N=32)
S MAINTAINING REFUELING VEHICLES AND EQUIPMENT	*	1	CD	*	*	*	*	1	*	*	*
T MAINTAINING MATERIALS HANDLING EQUIPMENT	1	*	*	CD	1	*	*	1	*	*	*
U MAINTAINING TOWING AND SERVICING VEHICLES AND EQUIPMENT	*	*	*	1	CD	*	*	*	*	*	*
V REPAIRING AND PAINTING VEHICLE BODIES	1	1	1	1	1	2	CD	*	CD	*	*

*DENOTES LESS THAN 1 PERCENT

TABLE 11

**BASE VEHICLE-SPECIFIC MAINTENANCE TASKS
(PERCENT MEMBERS PERFORMING)**

TASKS	DAFSC 47230/50	DAFSC 47231/51A	DAFSC 47231/51B	DAFSC 47231/51C	DAFSC 47231/51D	DAFSC 47232/52	DAFSC 47233/53
Q571 ADJUST CONVEYOR BELTS	16	2	1	8	7	1	1
Q572 ADJUST CRANE BRAKES OR CLUTCHES	43	3	1	11	18	2	1
Q573 ADJUST DIRT SHOES OR DEFLECTORS	25	2	1	3	5	1	1
Q574 ADJUST HOOD CASTER WHEEL ASSEMBLIES	26	1	1	4	5	1	2
Q575 ADJUST HOPPER DOORS	23	4	1	5	10	1	4
Q576 ADJUST LEANING WHEEL GEARBOXES	19	2	1	5	3	1	1
Q577 ADJUST MOLDBOARD SIDE SHIFT MECHANISMS	20	1	1	3	4	1	1
Q578 ADJUST PILE DRIVER COMPONENTS	5	1	1	1	0	0	0
Q579 ADJUST SNOWPLOW ATTACHMENTS	27	3	1	6	15	2	2
Q580 ADJUST SUCTION HOOD DEFLECTORS	26	2	1	7	9	1	2
Q581 ADJUST WOBBLE WHEEL ROLLER COMPONENTS	13	2	1	3	6	0	1
Q582 ALIGN SWEEPER BLOWERS	23	2	3	9	14	1	1
Q583 REBUILD SNOWPLOW ATTACHMENTS	21	2	1	6	11	1	2
Q584 REMOVE OR INSTALL "BELLY" GUARDS	25	7	1	4	8	1	1
Q585 REMOVE OR INSTALL AGITATORS	13	1	1	3	4	1	0
Q586 REMOVE OR INSTALL BULL GEARS OR BULL GEAR PINIONS	13	1	1	2	1	0	0
Q587 REMOVE OR INSTALL CONVEYOR BELTS	14	2	1	4	6	1	1
Q588 REMOVE OR INSTALL CRANE BOOMS	9	2	1	3	8	1	1
Q589 REMOVE OR INSTALL CRANE BRAKES OR CLUTCHES	27	2	1	9	12	1	1
Q590 REMOVE OR INSTALL CRANE FAIRLEAD ASSEMBLIES	9	1	1	3	1	1	0
Q591 REMOVE OR INSTALL DIRT SHOES OR DEFLECTORS	16	2	1	3	3	1	0
Q592 REMOVE OR INSTALL DOZER ACTUATING ARMS	17	1	1	1	3	3	1
Q593 REMOVE OR INSTALL DRIVE SPROCKETS	24	3	1	1	3	1	1
Q594 REMOVE OR INSTALL GANTRY COMPONENTS	6	1	1	1	2	1	0
Q595 REMOVE OR INSTALL GROUND SHEARS	9	3	1	1	2	0	0

TABLE 11 (CONTINUED)

**BASE VEHICLE-SPECIFIC MAINTENANCE TASKS
(PERCENT MEMBERS PERFORMING)**

TASKS	DAFSC 47230/50	DAFSC 47231/51A	DAFSC 47231/51B	DAFSC 47231/51C	DAFSC 47231/51D	DAFSC 47232/52	DAFSC 47233/53
Q596 REMOVE OR INSTALL HOIST CLOSING LINE CLUTCHES OR BRAKING SYSTEMS	15	2	1	3	4	1	1
Q597 REMOVE OR INSTALL HOOD CASTER WHEEL ASSEMBLIES	21	1	1	6	5	1	1
Q598 REMOVE OR INSTALL HOOD INTAKE TUBES	15	2	1	5	5	1	1
Q599 REMOVE OR INSTALL LEANING WHEEL GEARBOX COMPONENTS	19	2	1	3	4	1	1
Q600 REMOVE OR INSTALL LEANING WHEEL GEARBOXES	19	2	1	3	3	1	1
Q601 REMOVE OR INSTALL MOLDBOARD SIDE SHIFT MECHANISM COMPONENTS	17	2	1	3	2	1	1
Q602 REMOVE OR INSTALL MOLDBOARDS	15	2	1	2	2	1	1
Q603 REMOVE OR INSTALL OUTRIGGER ASSEMBLIES	20	4	1	9	20	2	1
Q604 REMOVE OR INSTALL PILE DRIVER COMPONENTS	5	2	1	1	2	1	0
Q605 REMOVE OR INSTALL POWER CONTROL SYSTEM SHEAR PINS	18	2	1	3	6	1	1
Q606 REMOVE OR INSTALL SNOWPLOW ATTACHMENTS	25	3	2	6	13	2	3
Q607 REMOVE OR INSTALL SUCTION HOOD DEFLECTORS	21	2	1	3	8	1	1
Q608 REMOVE OR INSTALL SWEEPER BLOWER ASSEMBLIES	30	3	2	12	17	1	1
Q609 REMOVE OR INSTALL TANDEM ROLLER SPRINKLING SYSTEM COMPONENTS	10	1	1	2	3	1	1
Q610 REMOVE OR INSTALL VACUUM SWEeper COUPLINGS	23	2	1	10	15	1	1
Q611 REMOVE OR INSTALL WOBBLE WHEEL ROLLER COMPONENTS	13	2	1	1	3	1	0

TABLE 12

FIRE AND CRASH FIREFIGHTING VEHICLE-SPECIFIC MAINTENANCE TASKS
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 47230/50	DAFSC 47231/51A	DAFSC 47231/51B	DAFSC 47231/51C	DAFSC 47231/51D	DAFSC 47232/52	DAFSC 47233/53
R612 ADJUST FIREFIGHTING EQUIPMENT CLUTCH MODULATION OF POWER DIVIDERS	1	58	2	1	2	1	0
R613 ADJUST FIREFIGHTING EQUIPMENT TURRET ELECTRICAL SYSTEM COMPONENTS	1	69	2	2	3	0	1
R614 ADJUST FIREFIGHTING EQUIPMENT TURRET HYDRAULIC SYSTEM COMPONENTS	1	75	1	1	3	1	1
R615 ADJUST FIREFIGHTING PUMP PACKINGS	2	84	2	2	5	1	1
R616 ADJUST FIREFIGHTING PUMPING SYSTEM PILOT VALVES	1	58	1	1	1	1	0
R617 ADJUST FIREFIGHTING PUMPING SYSTEM RELIEF VALVES	1	69	1	1	3	1	1
R618 DISASSEMBLE OR ASSEMBLE AUXILIARY GENERATORS	0	30	1	1	0	1	0
R619 DISASSEMBLE FIREFIGHTING EQUIPMENT TURRET HEADS	1	68	2	2	2	1	1
R620 DISASSEMBLE OR ASSEMBLE FIREFIGHTING PUMPING SYSTEM VALVES	1	69	1	1	2	1	0
R621 DISASS'BLE OR ASSEMBLE FIREFIGHTING PUMP ^c	1	52	1	1	2	1	0
R622 INSPECT FIREFIGHTING EQUIPMENT WATER OR FOAM TANKS	2	79	1	2	3	1	1
R623 INSPECT FLUSH FOAM SYSTEMS	1	62	2	1	2	1	1
R624 INSTALL FIREFIGHTING EQUIPMENT TURRET CONTROL COLUMN REPAIR KITS	0	60	1	0	1	1	0
R625 ISOLATE AUXILIARY GENERATOR MALFUNCTIONS	0	34	1	0	1	1	0
R626 ISOLATE FIREFIGHTING EQUIPMENT PNEUMATIC DISPENSING CONTROL SYSTEM MALFUNCTIONS	0	65	1	1	1	0	0

TABLE 12 (CONTINUED)

FIRE AND CRASH FIREFIGHTING VEHICLE-SPECIFIC MAINTENANCE TASKS
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 47230/50	DAFSC 47231/51A	DAFSC 47231/51B	DAFSC 47231/51C	DAFSC 47231/51D	DAFSC 47232/52	DAFSC 47233/53
R627 ISOLATE FIREFIGHTING EQUIPMENT TURRET ELECTRICAL SYSTEM MALFUNCTIONS	1	74	2	1	2	0	1
R628 ISOLATE FIREFIGHTING EQUIPMENT TURRET HYDRAULIC SYSTEM MALFUNCTIONS	0	75	2	2	2	1	1
R629 ISOLATE FIREFIGHTING PUMPING SYSTEM MALFUNCTIONS	1	76	2	2	2	1	1
R630 ISOLATE FIREFIGHTING VEHICLE BOOSTER HEATER SYSTEM MALFUNCTIONS	1	65	2	0	2	1	0
R631 OVERHAUL FIREFIGHTING EQUIPMENT PNEUMATIC DISPENSING CONTROL SYSTEMS	0	54	2	0	1	0	0
R632 OVERHAUL FIREFIGHTING EQUIPMENT PRIMER UNITS	0	50	1	1	2	1	0
R633 PHASE TURRETS	1	57	2	1	1	1	0
R634 REMOVE OR INSTALL AUXILIARY GENERATORS	0	31	2	1	2	1	0
R635 REMOVE OR INSTALL FIREFIGHTING EQUIPMENT HOSE REEL CONTROLS	0	58	1	1	1	1	0
R636 REMOVE OR INSTALL FIREFIGHTING EQUIPMENT HOSE REELS	0	44	1	1	1	1	0
R637 REMOVE OR INSTALL FIREFIGHTING EQUIPMENT PNEUMATIC DISPENSING CONTROL SYSTEM COMPONENTS	0	54	2	1	1	0	0
R638 REMOVE OR INSTALL FIREFIGHTING EQUIPMENT PRIMER UNITS	0	50	1	1	2	1	0
R639 REMOVE OR INSTALL FIREFIGHTING EQUIPMENT TANK BAFFLES	0	32	1	1	1	1	0
R640 REMOVE OR INSTALL FIREFIGHTING EQUIPMENT TURRET FOAM AND WATER SYSTEM COMPONENTS	1	70	2	1	1	1	1

TABLE 12 (CONTINUED)
FIRE AND CRASH FIREFIGHTING VEHICLE-SPECIFIC MAINTENANCE TASKS
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 47230/50	DAFSC 47231/51A	DAFSC 47231/51B	DAFSC 47231/51C	DAFSC 47231/51D	DAFSC 47232/52	DAFSC 47233/53
R641 REMOVE OR INSTALL FIREFIGHTING EQUIPMENT TURRET CONTROL CABLES	1	75	2	2	2	1	1
R642 REMOVE OR INSTALL FIREFIGHTING EQUIPMENT TURRET ELECTRICAL SYSTEM COMPONENTS	0	70	2	1	3	1	0
R643 REMOVE OR INSTALL FIREFIGHTING EQUIPMENT TURRET HYDRAULIC SYSTEM COMPONENTS	0	68	2	1	1	1	0
R644 REMOVE OR INSTALL FIREFIGHTING EQUIPMENT WATER OR FOAM TANKS	0	43	1	2	2	1	0
R645 REMOVE OR INSTALL FIREFIGHTING PUMP CLUTCHES	1	68	1	1	3	1	0
R646 REMOVE OR INSTALL FIREFIGHTING PUMPING SYSTEM VALVES	1	65	1	1	2	1	0
R647 REMOVE OR INSTALL FIREFIGHTING PUMPS	1	50	1	1	3	1	0
R648 REMOVE OR INSTALL FIREFIGHTING VEHICLE BOOSTER HEATERS	0	47	2	1	1	1	0
R649 REMOVE OR INSTALL FIREFIGHTING VEHICLE BOOSTER HEATER COMPONENTS	0	59	2	1	1	0	0
R650 REMOVE OR INSTALL FIREFIGHTING VEHICLE VITERIZATION SYSTEM COMPONENTS	1	53	2	2	1	3	0
R651 REPACK FIREFIGHTING PUMPS	0	70	1	1	0	1	0
R652 SERVICE FIREFIGHTING EQUIPMENT DISPENSING SYSTEM LINE STRAINERS	1	50	2	1	2	0	0
R653 SYNCHRONIZE FIREFIGHTING EQUIPMENT ENGINE REVOLUTIONS PER MINUTE	1	49	2	1	2	1	0
R654 SYNCHRONIZE FIREFIGHTING EQUIPMENT TRANSMISSION GOVERNER	0	44	1	1	2	0	0
R655 TEST FIREFIGHTING EQUIPMENT CLUTCH MODULATION OF POWER DIVIDERS	0	56	2	1	2	1	1

TABLE 13

REFUELING VEHICLE-SPECIFIC MAINTENANCE TASKS
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 47230/50	DAFSC 47231/51A	DAFSC 47231/51B	DAFSC 47231/51C	DAFSC 47231/51D	DAFSC 47232/52	DAFSC 47233/53
S656 ADJUST HYDRANT COUPLERS (MOOSEHEADS)	0	5	50	1	3	1	0
S657 ADJUST REFUELING EQUIPMENT AIR PRIORITY VALVES	0	5	58	2	1	1	0
S658 ADJUST REFUELING EQUIPMENT BOOSTER HEATER SYSTEM COMPONENTS	0	3	31	1	1	0	0
S659 ADJUST REFUELING EQUIPMENT DISPENSING SYSTEM VALVES	1	4	77	1	2	1	0
S660 ADJUST REFUELING EQUIPMENT FLOAT CONTROL VALVES	0	4	71	2	1	1	0
S661 ADJUST REFUELING EQUIPMENT HOSE REEL COMPONENTS	1	4	82	3	5	1	0
S662 CALIBRATE REFUELING METERS	1	5	81	1	2	1	0
S663 DISASSEMBLE OR ASSEMBLE HYDRANT COUPLERS (MOOSEHEADS)	1	6	54	2	3	0	0
S664 DISASSEMBLE OR ASSEMBLE REFUELING EQUIPMENT DISPENSING SYSTEM VALVES	1	5	78	1	2	1	0
S665 DISASSEMBLE REFUELING EQUIPMENT HOSE REEL COMPONENTS	1	4	78	2	3	1	0
S666 DISASSEMBLE OR ASSEMBLE REFUELING PUMP ASSEMBLIES	1	4	76	1	2	1	1
S667 INSPECT REFUELING EQUIPMENT TANK MOUNTINGS	1	4	80	2	4	2	1
S668 INSPECT REFUELING NOZZLES OR HYDRANT COUPLERS (MOOSEHEADS)	1	4	69	2	3	2	0
S669 ISOLATE REFUELING EQUIPMENT BOOSTER HEATER SYSTEM MALFUNCTIONS	0	3	31	1	2	0	0
S670 ISOLATE REFUELING EQUIPMENT DISPENSING SYSTEM MALFUNCTIONS	2	5	73	1	1	0	0
S671 ISOLATE REFUELING METER MALFUNCTIONS	1	4	74	1	2	0	0

TABLE 13 (CONTINUED)

REFUELING VEHICLE-SPECIFIC MAINTENANCE TASKS
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 47230/50		DAFSC 47231/51A		DAFSC 47231/51B		DAFSC 47231/51C		DAFSC 47231/51D		DAFSC 47232/52		DAFSC 47233/53	
S672 PERFORM REFUELING HOSE HYDROSTATIC TESTS			1		5		82		2		3		1	0
S673 PERFORM REFUELING NOZZLE HYDROSTATIC TESTS		0		5		53		1		2		0	0	
S674 PERFORM SEGREGATOR FLOAT BALLAST CHECKS		0		4		54		1		1		0	0	
S675 PERFORM STATIC GROUND REEL CONTINUITY TESTS		1		4		79		2		2		1	0	
S676 REMOVE OR INSTALL AIR ELIMINATORS	1		4		60		1		1		0	0		
S677 REMOVE OR INSTALL DEFUEL KITS	0		4		57		2		1		1	0		
S678 REMOVE OR INSTALL HYDRANT COUPLERS (HOSEHEADS)	1		4		54		2		3		1	0		
S679 REMOVE OR INSTALL MANHOLE COVERS	1		3		73		2		2		2	2		
S680 REMOVE OR INSTALL REFUELING EQUIPMENT BOOSTER HEATER SYSTEM COMPONENTS		0		3		27		1		0		1	0	
S681 REMOVE OR INSTALL REFUELING EQUIPMENT DISPENSING SYSTEM VALVES	1		4		75		2		2		1	0		
S682 REMOVE OR INSTALL REFUELING EQUIPMENT FILTERS	3		5		82		3		3		2	0		
S683 REMOVE OR INSTALL REFUELING EQUIPMENT FLOAT CONTROL VALVES	0		3		67		1		1		1	0		
S684 REMOVE OR INSTALL REFUELING EQUIPMENT HOSE REEL DRIVE COMPONENTS	1		3		75		1		3		1	0		
S685 REMOVE OR INSTALL REFUELING EQUIPMENT HOSE REELS	2		3		75		3		3		1	0		
S686 REMOVE OR INSTALL REFUELING EQUIPMENT LINE STRAINERS	1		4		80		3		2		1	0		
S687 REMOVE OR INSTALL REFUELING EQUIPMENT TANK PADS	0		3		73		2		2		1	0		

TABLE 13 (CONTINUED)

REFUELING VEHICLE-SPECIFIC MAINTENANCE TASKS
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 47230/50	DAFSC 47231/51A	DAFSC 47231/51B	DAFSC 47231/51C	DAFSC 47231/51D	DAFSC 47232/52	DAFSC 47233/53
S688 REMOVE OR INSTALL REFUELING EQUIPMENT							
VITALIC COUPLINGS	1	5					
S689 REMOVE OR INSTALL REFUELING HOSES	2	3					
S690 REMOVE OR INSTALL REFUELING METER							
COMPONENTS	1	3					
S691 REMOVE OR INSTALL REFUELING PUMP							
ASSEMBLIES	2	3					
S692 REMOVE OR INSTALL SEGREGATOR FLOAT							
ASSEMBLIES	1	3					
S693 REMOVE OR INSTALL STATIC DISCHARGE							
REELS	2	3					
			84	2	3	1	0
			85	3	4	2	1
			79	2	2	1	0
			76	1	2	2	0
			59	2	1	1	0
			83	2	3	2	1

TABLE 14

MATERIALS HANDLING EQUIPMENT-SPECIFIC MAINTENANCE TASKS
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 47230/50	DAFSC 47231/51A	DAFSC 47231/51B	DAFSC 47231/51C	DAFSC 47231/51D	DAFSC 47232/52	DAFSC 47233/53
T694 ADJUST CARGO LOADER DECK EXTENSIONS	1	3	1	1	24	4	1
T695 ADJUST CARGO LOADER PALLET STOP MECHANISMS	3	4	1	51	12	2	1
T696 ADJUST CARGO LOADER PLATFORM SIDE SHIFT MECHANISMS	2	4	1	39	7	1	0
T697 ADJUST ELECTRIC FORKLIFT ACCELERATING OR DIRECTIONAL SYSTEM COMPONENTS	7	5	1	36	18	2	0
T698 ADJUST FORKLIFT CHAINS	21	5	2	70	35	3	0
T699 ADJUST FORKLIFT CONTROL INCHING VALVES	11	5	2	58	24	2	1
T700 ADJUST FORKLIFT TILT CYLINDERS	15	6	1	54	25	2	1
T701 ADJUST SAFETY SEAT CONTROL COMPONENTS	6	4	1	28	12	1	3
T702 DISASSEMBLE OR ASSEMBLE ELECTRIC FORKLIFT ACCELERATING OR DIRECTIONAL SYSTEM COMPONENTS	6	2	1	28	15	2	0
T703 INSPECT FORKLIFT ELECTRICAL DRIVE MOTORS	7	4	1	27	13	2	0
T704 INSPECT FORKLIFT MAST ASSEMBLIES	22	7	2	77	40	5	1
T705 ISOLATE ELECTRIC FORKLIFT ACCELERATING OR DIRECTIONAL SYSTEM MALFUNCTIONS	6	3	3	28	16	1	0
T706 REMOVE OR INSTALL CARGO LOADER PALLET LOCK COMPONENTS	4	2	1	48	9	1	0
T707 REMOVE OR INSTALL CARGO LOADER PALLET LOCKS	3	3	1	48	10	1	1
T708 REMOVE OR INSTALL CARGO LOADER PALLET STOPS	3	3	1	46	9	1	1
T709 REMOVE OR INSTALL CARGO LOADER PLATFORM SIDE SHIFT MECHANISM COMPONENTS	2	2	2	31	4	1	0
T710 REMOVE OR INSTALL CARGO LOADER PLATFORMS	2	2	1	14	2	0	1

TABLE 14 (CONTINUED)

MATERIALS HANDLING EQUIPMENT-SPECIFIC MAINTENANCE TASKS
 (PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 47230/50	DAFSC 47231/51A	DAFSC 47231/51B	DAFSC 47231/51C	DAFSC 47231/51D	DAFSC 47232/52	DAFSC 47233/53
T711 REMOVE OR INSTALL ELECTRIC FORKLIFTS ACCELERATING OR DIRECTIONAL SYSTEM COMPONENTS	4	2	1	1	23	13	1
T712 REMOVE OR INSTALL FORKLIFT CONTROL INCHING VALVES	5	2	1	1	40	13	1
T713 REMOVE OR INSTALL FORKLIFT COUNTER WEIGHTS	7	2	1	1	41	15	1
T714 REMOVE OR INSTALL FORKLIFT MAST ASSEMBLIES	10	3	1	1	47	28	1
T715 REMOVE OR INSTALL FORKLIFT MAST ASSEMBLY COMPONENTS	9	3	1	1	54	26	1

TABLE 15

**TOWING AND SERVICING VEHICLE-SPECIFIC MAINTENANCE TASKS
(PERCENT MEMBERS PERFORMING)**

TASKS	DAFSC 47230/50	DAFSC 47231/51A	DAFSC 47231/51B	DAFSC 47231/51C	DAFSC 47231/51D	DAFSC 47232/52	DAFSC 47233/53
U716 ADJUST HI-LIFT CONTROL SYSTEM COMPONENTS	7	3	1	8	24	1	0
U717 ADJUST SERVICING EQUIPMENT BOOM ASSEMBLY CONTROLS	8	3	1	11	33	1	0
U718 ADJUST SERVICING EQUIPMENT BOOM ASSEMBLY SAFETY DEVICES	7	3	1	10	30	1	1
U719 ADJUST SERVICING EQUIPMENT TURRET HEADS	2	3	1	3	11	0	1
U720 DISASSEMBLE OR ASSEMBLE SERVICING EQUIPMENT BOOSTER HEATER SYSTEM COMPONENTS	2	5	1	6	19	0	0
U721 DISASSEMBLE OR ASSEMBLE SERVICING EQUIPMENT DISPENSING SYSTEM VALVES	2	3	2	6	22	0	0
U722 DISASSEMBLE OR ASSEMBLE SERVICING EQUIPMENT TURRET HEADS	2	3	1	3	8	0	0
U723 DISASSEMBLE OR ASSEMBLE SERVICING EQUIPMENT HOSE REEL COMPONENTS	4	3	3	8	18	0	0
U724 INSPECT SERVICING EQUIPMENT AERIAL WORK PLATFORMS	8	3	1	9	31	2	0
U725 INSPECT SERVICING EQUIPMENT BOOM ASSEMBLIES	10	4	1	12	36	3	0
U726 ISOLATE HI-LIFT CONTROL SYSTEM MALFUNCTIONS	9	3	1	9	23	1	0
U727 ISOLATE SERVICING EQUIPMENT BOOSTER HEATER SYSTEM	2	4	1	6	19	0	0
U728 ISOLATE SERVICING EQUIPMENT DISPENSING SYSTEM MALFUNCTIONS	2	3	2	5	20	0	0
U729 REMOVE OR INSTLL DRAW BARS	3	1	1	3	5	1	0
U730 REMOVE OR INSTALL HI-LIFT CONTROL SYSTEM COMPONENTS	6	3	1	7	20	0	0

TABLE 15 (CONTINUED)

**TOWING AND SERVICING VEHICLE-SPECIFIC MAINTENANCE TASKS
(PERCENT MEMBERS PERFORMING)**

TASKS	DAFSC 47230/50	DAFSC 47231/51A	DAFSC 47231/51B	DAFSC 47231/51C	DAFSC 47231/51D	DAFSC 47232/52	DAFSC 47233/53
U731 REMOVE OR INSTALL SERVICING EQUIPMENT AERIAL WORK PLATFORMS	2	2	1	5	15	0	0
U732 REMOVE OR INSTALL SERVICING EQUIPMENT BOOM ASSEMBLY SAFETY DEVICES	6	3	1	8	23	0	0
U733 REMOVE OR INSTALL SERVICING EQUIPMENT BOOM ASSEMBLY COMPONENTS	5	2	1	9	22	0	0
U734 REMOVE OR INSTALL SERVICING EQUIPMENT BOOM ASSEMBLIES	5	2	1	6	15	0	0
U735 REMOVE OR INSTALL SERVICING EQUIPMENT BOOSTER HEATER SYSTEM COMPONENTS	2	4	1	5	19	0	0
U736 REMOVE OR INSTALL SERVICING EQUIPMENT DISPENSING SYSTEM VALVES	2	4	3	6	21	0	0
U737 REMOVE OR INSTALL SERVICING EQUIPMENT DISPENSING SYSTEM NOZZLES	2	3	3	4	17	0	0
U738 REMOVE OR INSTALL SERVICING EQUIPMENT HOSE REELS	2	3	2	9	17	1	0
U739 REMOVE OR INSTALL SERVICING EQUIPMENT TURRET HEADS	1	3	1	3	7	0	0

TABLE 16

**VEHICLE BODY REPAIR TASKS
(PERCENT MEMBERS PERFORMING)**

TASKS	DAFSC 47230/50	DAFSC 47231/51A	DAFSC 47231/51B	DAFSC 47231/51C	DAFSC 47231/51D	DAFSC 47232/52	DAFSC 47233/53
V740 ADJUST HINGES OR LOCKING MECHANISMS	14	31	27	15	17	23	30
V741 APPLY BODY FILLERS	4	9	10	3	3	12	87
V742 APPLY LETTERING OR IDENTIFYING INSIGNIAS TO VEHICLE BODIES	14	17	22	13	16	18	89
V743 APPLY PRIMERS	8	10	6	3	4	12	87
V744 APPLY UNDERCOATING TO VEHICLE BODIES	3	3	3	3	1	7	52
V745 APPLY WEATHER STRIPPING TO BODY PARTS	8	20	12	6	9	13	86
V746 CONSTRUCT SEAT COVERS	2	5	2	2	1	3	59
V747 CONSTRUCT WOODEN BODY PARTS	1	2	1	1	0	3	43
V748 CUT SAFETY GLASS	4	3	2	2	2	6	82
V749 INSPECT DAMAGED BODY SECTIONS	12	14	15	8	10	20	81
V750 INSTALL CURVED GLASS	2	4	11	2	2	5	80
V751 INSTALL NONCURVED GLASS	6	11	14	6	4	8	81
V752 MEND UPHOLSTERY	4	6	5	3	5	5	67
V753 PAINT VEHICLE BODY SURFACES	8	10	14	8	7	14	85
V754 PREPARE PAINT FOR PAINTING	6	7	7	5	4	11	84
V755 PREPARE VEHICLE BODY SURFACES FOR PAINTING							
V756 PRESSURE TEST RADIATORS	8	9	9	8	5	14	86
V757 PURGE VEHICLE FUEL TANKS	23	21	17	18	25	26	69
V758 REBUILD SEAT FRAMES	19	8	24	10	18	13	44
V759 REMOVE OR INSTALL BUMPER	1	1	2	1	0	2	64
V760 REMOVE OR INSTALL HINGES	6	11	14	6	6	12	81
V761 REMOVE OR INSTALL LOCKS OR LATCHES	8	19	17	7	9	12	83
V762 REMOVE OR INSTALL METAL BODY PARTS SUCH AS DOORS, FENDERS, OR FLOORS	13	24	23	8	13	17	86
V763 REMOVE OR INSTALL UPHOLSTERY	9	12	19	6	10	11	83
	6	10	7	2	4	7	

TABLE 16 (CONTINUED)
 VEHICLE BODY REPAIR TASKS
 (PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 47230/50	DAFSC 47231/51A	DAFSC 47231/51B	DAFSC 47231/51C	DAFSC 47231/51D	DAFSC 47232/52	DAFSC 47233/53
V764 REMOVE OR INSTALL VEHICLE LIFT GATE ASSEMBLIES	3	4	2	3	1	3	54
V765 REMOVE OR INSTALL VEHICLE MOLDINGS	3	6	6	1	1	8	76
V766 REMOVE OR INSTALL WINDOW CHANNELS	7	13	20	5	6	9	82
V767 REMOVE OR INSTALL WINDOW REGULATORS	10	16	20	9	6	14	85
V768 REPAIR FIBERGLASS COMPONENTS	1	6	2	0	0	2	49
V769 REPAIR RADIATOR OR HEATER CORE LEAKS	11	14	10	7	8	15	73
V770 ROD RADIATOR CORES	1	2	2	2	0	2	31
V771 SHRINK OR STRETCH DAMAGED METAL AREAS	3	2	1	1	1	4	78
V772 STRAIGHTEN DISTORTED PANELS, DOORS, OR FENDERS	7	10	9	5	6	9	84
V773 STRAIGHTEN VEHICLE FRAMES	0	1	1	2	1	1	23

TABLE 17
DISTRIBUTION OF MEMBERS PERFORMING JOBS BY DAFSC GROUPS
(NUMBER RESPONDING)

	DAFSC 47230/ 67250 (N=371)	DAFSC 47231A/ 47251A (N=189)	DAFSC 47231B/ 47251B (N=177)	DAFSC 47231C/ 47251C (N=230)	DAFSC 47231D/ 47251D (N=217)	DAFSC 47233/ 47253 (N=1062)	DAFSC 47233/ 47253 (N=203)	DAFSC 47273 (N=333)	DAFSC 47299 (N=65)	DAFSC 47299 (N=32)
I. VEHICLE REPAIR MECHANICS (GRP056)	314	173	168	213	194	851	21	140	79	-
A. GENERAL REPAIR MECHANICS (GRP403)	236	108	129	154	140	544	10	105	52	-
1. GENERAL REPAIR FIREFIGHTING VEHICLE MECHANICS (GRP1043)	2	CB	1	-	1	-	-	5	-	-
2. GENERAL REPAIR REFUELING VEHICLE MECHANICS (GRP677)	2	1	CB	-	4	-	-	12	-	-
3. SERVICING EQUIPMENT MECHANICS (GRP1263)	3	-	1	-	11	-	-	1	-	-
4. UNIT MECHANICS (GRP533) VEHICLE MECHANIC SECTION SUPERVISORS (GRP417)	5	4	1	-	4	CB	1	2	1	-
B. MINOR REPAIR FIREFIGHTING VEHICLE MECHANICS (GRP381)	9	3	2	2	1	CB	3	CB	19	-
C. VEHICLE BODY AND MINOR REPAIR MECHANICS (GRP409)	1	-	1	-	-	7	4	-	-	-
D. ENGINE AND MINOR REPAIR MECHANICS (GRP210)	5	2	-	7	6	CB	-	2	-	-
E. MINOR REPAIR AND ADMINISTRATIVE PERSONNEL (GRP106)	-	-	-	1	1	9	-	3	2	-

TABLE 17 (CONTINUED)
DISTRIBUTION OF MEMBERS PERFORMING JOBS BY DAFSC GROUPS
(NUMBER RESPONDING)

	DAFSC 47230/ 47250/ (N=371)	DAFSC 47231A/ 47251A (N=189)	DAFSC 47231B/ 47251B (N=177)	DAFSC 47231C/ 47251C (N=230)	DAFSC 47231D/ 47251D (N=217)	DAFSC 47232/ 47252 (N=1062)	DAFSC 47233/ 47253 (N=203)	DAFSC 47234/ 47254 (N=333)	DAFSC 47235/ 47255 (N=280)	DAFSC 47236/ 47256 (N=55)
F. REFUELING VEHICLE EQUIPMENT MECHANICS										
I. REFUELING VEHICLE SECTION SUPERVISORS (GRP181)	-	1	29	1	-	2	-	5	-	-
II. QUALITY ASSURANCE PERSONNEL (GRP048)	9	1	-	2	2	26	1	20	13	-
III. TIRE SHOP PERSONNEL (GRP027)	10	1	-	2	5	45	2	1	5	-
IV. VEHICLE BODY REPAIR PERSONNEL (GRP057)	2	1	-	-	1	12	2	26	-	-
V. MANAGERIAL AND SUPERVISORY PERSONNEL (GRP036)	6	2	3	3	2	30	1	125	110	C30
VI. MAINTENANCE CONTROLLERS (GRP082)	5	-	-	1	4	18	1	6	5	-
VII. TRAINING PERSONNEL (GRP019)	9	1	-	4	4	22	-	26	CD	-

TABLE 18

AVERAGE PERCENT TIME SPENT PERFORMING DUTIES BY
DAFSC 47273 MEMBERS PROGRESSED THROUGH AFSs 472X2 AND 472X3

DUTIES	DAFSC 47273 PROGRESSED THROUGH AFS 472X2 (N=220)	DAFSC 47273 PROGRESSED THROUGH AFS 472X3 (N=48)
<u>SUPERVISORY, MANAGERIAL AND ADMINISTRATIVE DUTIES</u>		
A ORGANIZING AND PLANNING	12	11
B DIRECTING AND IMPLEMENTING	17	13
C INSPECTING AND EVALUATING	18	15
D TRAINING	8	10
E PERFORMING SECTION MAINTENANCE CONTROL AND ADMINISTRATIVE FUNCTIONS	6	6
F PERFORMING SUPPLY FUNCTIONS	<u>3</u>	<u>3</u>
TOTAL TIME SPENT ON NON-TECHNICAL DUTIES	64	58
<u>VEHICLE MAINTENANCE TECHNICAL DUTIES</u>		
G PERFORMING GENERAL MAINTENANCE AND METAL WORKING TASKS	<u>2</u>	<u>1</u>
H MAINTAINING ENGINES	3	2
I MAINTAINING ELECTRICAL SYSTEMS	10	7
J MAINTAINING HYDRAULIC AND PNEUMATIC SYSTEMS	1	*
K MAINTAINING FUEL AND EXHAUST SYSTEMS	3	2
L MAINTAINING COOLING, HEATING, AND AIR CONDITIONING SYSTEMS	3	2
M MAINTAINING CLUTCHES, TRANSMISSIONS, FLUID COUPLINGS, AND TORQUE CONVERTERS	2	1
N MAINTAINING DRIVE LINES, STEERING, AND SUSPENSION SYSTEMS	4	3
O MAINTAINING BRAKE SYSTEMS	4	2
P REPAIRING TIRES	2	1
Q MAINTAINING BASE VEHICLES AND EQUIPMENT	*	*
R MAINTAINING FIRE AND CRASH FIREFIGHTING VEHICLES AND EQUIPMENT	*	*
S MAINTAINING REFUELING VEHICLES AND EQUIPMENT	*	*
T MAINTAINING MATERIALS HANDLING EQUIPMENT	*	*
U MAINTAINING TOWING AND SERVICING VEHICLES AND EQUIPMENT	*	*
V REPAIRING AND PAINTING VEHICLE BODIES	<u>2</u>	<u>13</u>
TOTAL TIME SPENT ON TECHNICAL DUTIES	36	40

* DENOTES LESS THAN 1 PERCENT

UTILIZATION OF VEHICLE MAINTENANCE PERSONNEL

The job structure, and DAFSC analyses showed a large amount of commonality between the jobs of personnel within the 472X0 (Base Vehicle Equipment Mechanic), 472X1A/B/C/D (Special Vehicle Mechanic) and 472X2 (General Purpose Vehicle Mechanic) specialties. As indicated in the analyses, these members are basically mechanics whose jobs included repairing, maintaining, inspecting, and servicing systems and system components on a wide variety of different vehicles. The commonality among the jobs of these mechanics occurs in the tasks performed which were common to most vehicles and does not relate to equipment specific to vehicles, such as firefighting, refueling, or base vehicles.

In terms of utilization, the AFSC 472X1A (Special Vehicle Mechanic - Firetrucks) and 472X1B (Special Vehicle Mechanic - Refueling Vehicles) personnel are performing jobs as described in their specialty descriptions. Like other mechanics, they maintained systems which are common to all vehicles. This maintenance, however, was performed on either firefighting (for DAFSC 472X1A members) or refueling vehicles (for DAFSC 472X1B members), with only a few members spending a small amount of time repairing some of the general purpose vehicles. The 472X1A (Special Vehicle Mechanic - Firetrucks) and 472X1B (Special Vehicle Mechanic - Refueling Vehicles) personnel also specialized on equipment specific to either firefighting or refueling vehicles. These members grouped separately from other mechanics. The 472X1A (Special Vehicle Mechanic - Firetrucks) members fell primarily into two job groups with the same being true for 472X1B (Special Vehicle Mechanic - Refueling Vehicles) personnel. Generally, the job structure and DAFSC analyses showed AFSSs 472X1A (Special Vehicle Mechanic - Firetrucks) and 472X1B (Special Vehicle Mechanic - Refueling Vehicles) personnel being utilized consistent with their specialty description and supported, in terms of structure, the separation of these members from other mechanics in the career field.

The job structure and DAFSC analyses showed minor distinctions among the jobs of AFSSs 472X0 (Base Vehicle Equipment Mechanic), 472X1C (Special Vehicle Mechanic - Materials Handling Equipment), 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles), and 472X2 (General Purpose Vehicle Mechanic) personnel in terms of the tasks performed. In the job structure analysis, these members grouped together and appeared to be performing the same job. Both analyses showed some distinction between DAFSC 472X2 (General Purpose Vehicle Mechanic) personnel and DAFSC 472X0 (Base Vehicle Equipment Mechanic), 472X1C (Special Vehicle Mechanic - Materials Handling Equipment), and 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles) members in terms of the vehicles these members repaired. The AFS 472X2 (General Purpose Vehicle Mechanic) mechanics primarily worked on general purpose vehicles. Among personnel holding AFSSs of 472X0 (Base Vehicle Equipment Mechanic), 472X1C (Special Vehicle Mechanic - Materials Handling Equipment), and 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles), there was more similarity on the type of vehicles maintained, with members in all three AFSSs repairing

base vehicles, materials handling equipment, and towing and servicing vehicles along with some of the general purpose vehicles. Generally, AFS 472X2 (General Purpose Vehicle Mechanic) personnel were being utilized consistent with their specialty description. The AFSs 472X0 (Base Vehicle Equipment Mechanic), 472X1C (Special Vehicle Mechanic - Materials Handling Equipment), and 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles) members, on the other hand, did not specialize to the extent that career field documents indicate. Additionally, members in each of these AFSs did not form separate and distinct job groups as would be expected with the current career field structure.

The job structure and DAFSC analyses indicated some possible problems with the current merger of AFSs 472X2 (General Purpose Vehicle Mechanic) and 472X3 (Vehicle Body Mechanic) at the 7-skill level into DAFSC 47273 (General Purpose Vehicle and Body Maintenance Supervisor). This merger suggests some commonality between the jobs of AFSs 472X2 (General Purpose Vehicle Mechanic) and 472X3 (Vehicle Body Mechanic) personnel. As indicated in the job structure and DAFSC analyses, commonality of technical tasks between the jobs of members within these two specialties is minimal. The AFS 472X3 (Vehicle Body Mechanic) grouped apart from all other mechanics in the job structure analysis and both the job structure and DAFSC analyses showed the job of these members consisting mainly of repairing and painting vehicle bodies, with very little time spent performing tasks related to maintenance of any vehicle system. AFS 472X2 members (General Purpose Vehicle Mechanic), on the other hand, grouped with members in AFSs 472X0 (Base Vehicle Equipment Mechanic) and 472X1A/B/C/D (Special Vehicle Mechanic), mainly repaired and maintained systems on general purpose vehicles, and spent little time repairing vehicle bodies. In fact, AFS 472X2 (General Purpose Vehicle Mechanic) had much more in common in terms of the tasks performed with AFSs 472X0 (Base Vehicle Equipment Mechanic) and 472X1A/B/C/D (Special Vehicle Mechanic) than with AFS 472X3 members (Vehicle Body Mechanic). Additionally, it would be expected that the technical tasks performed by DAFSC 47273 members (General Purpose Vehicle and Body Maintenance Supervisor) would be related to the jobs of both General Purpose Vehicle Mechanics (AFS 472X2) and Vehicle Body Mechanics (AFS 472X3). As shown in the DAFSC analysis, however, the technical tasks performed by General Purpose Vehicle and Body Maintenance Supervisors (AFSC 47273) are affected by prior experience. The AFS 47273 members (General Purpose Vehicle and Body Maintenance Supervisor) who progressed through the 472X3 (Vehicle Body Mechanic) career ladder spent more of their time on tasks related to the Vehicle Body Mechanic (AFS 472X3) job than did members who progressed through the 472X2 (General Purpose Vehicle Mechanic) career ladder. From these findings, it would appear that DAFSC 47273 members (General Purpose Vehicle and Body Maintenance Supervisors) are not being utilized as intended and the earlier merger at the 7-skill level for AFSs 472X2 (General Purpose Vehicle Mechanic) and 472X3 (Vehicle Body Mechanic) members may not be working effectively.

The current utilization and classification of DAFSC 47233 and 47253 (Vehicle Body Mechanic) as vehicle body mechanics was supported by the results of the job structure and DAFSC analyses. These members grouped

together in the job structure and both of the analyses showed DAFSC 47233 and 47253 (Vehicle Body Mechanics) personnel performing primarily body repair tasks. Generally, the job structure and DAFSC analyses showed DAFSC 47233 and 47253 (Vehicle Body Mechanics) personnel being utilized as described in their specialty description and supported, in terms of structure, the separation of these mechanics from other mechanics in the career field.

Finally, in the job structure analysis, a group of Maintenance Controllers were identified. The jobs performed by this group appear to be similar to the planning and scheduling functions performed by Vehicle Maintenance Control and Analysis (AFS 472X4) personnel. This being the case, members within the Maintenance Controllers job group were not being utilized as mechanics but rather were performing a job that is the responsibility of members in another specialty.

Several conclusions about the utilization of personnel in AFS 472XX emerge.

1. AFS 472X1A and B incumbents are maintaining equipment appropriate to their specialty and AFS 472X3 personnel are repairing vehicle bodies.
2. Except for AFS 472X3 incumbents, members of other specialties share the performance of many common tasks - repairing the engines, drive systems, and brake systems common to vehicles.
3. Incumbents of AFS 472X2 generally maintain general purpose vehicles, although most of the tasks they perform on these vehicles are tasks that must also be performed on other vehicles.
4. Large percentages of incumbents in AFS 472X1C maintain materials handling equipment, although appreciable percentages of these personnel perform tasks specific to equipment of other specialties.
5. Few Base Vehicle Equipment (AFS 472X0) and Towing and Servicing Vehicle (AFS 472X1D) personnel perform equipment repair specific to their specialty. No equipment-specific task is performed by as many as 50 percent of the appropriate specialty, and most tasks are performed by fewer than 30 percent.
6. For the D-shred, the percentages performing tasks that are more appropriately performed by C-shred incumbents are as large as the percentages of D-shred personnel performing their own equipment-specific tasks.
7. Nevertheless, larger percentages of AFS 472X0 and 472X1D incumbents are performing the equipment-specific tasks for their respective specialties than are members of other specialties. The magnitude of difference, even for the tasks performed by very few incumbents, ranges from 2 to 1 to 5 to 1.

8. Some members in the career field are performing a job similiar to the planning and scheduling functions performed by Vehicle Maintenance Control and Analysis (AFS 472X4) personnel.

9. The ladder by which supervisory incumbents progressed to DAFSC 47273 influences their utilization.

JOB SATISFACTION

Table 19 presents data reflecting job interest, perceived utilization of talents and training, and reenlistment intentions of selected TAFMS groups for each of the seven Vehicle Maintenance specialties. Comparisons were also made between 472XX TAFMS groups and comparative samples of all other Direct Support career ladders surveyed in 1981.

On the job interest and perceived utilization of talents indicators, the Vehicle Maintenance groups, with the exception of AFS 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles) career group (97+ months), were equal to or higher than corresponding groups in the comparative sample. The AFS 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles) career group (97+ months) on these two indicators was not only lower than the comparative sample group but also lower than any other Vehicle Maintenance group including the AFS 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles) first- and second-enlistment groups. Although not as drastic, a decrease also occurs for AFSs 472X0 (Base Vehicle Equipment Mechanic) and 472X1A (Special Vehicle Mechanic - Firetrucks) career groups. On these two job satisfaction indicators, there is an increase from first to second enlistment for these two specialties, followed by a decrease for the career group. Another figure to note is the AFS 472X1B (Special Vehicle Mechanic - Refueling Vehicles) second-enlistment group. Although this group was higher than the comparative sample second-enlistment group on these two indicators, less of them found their job interesting and less perceived their talents as being well utilized as members in the AFS 472X1B (Special Vehicle Mechanic - Refueling Vehicles) first-enlistment and career groups. Finally, the comparative sample data shows a substantial increase in job interest and perceived utilization of talents as time in service increases. As shown in Table 19, this trend does not occur for the Vehicle Maintenance specialties.

The perceived utilization of training indicator showed opposite trends. On this job satisfaction indicator, almost all of the Vehicle Maintenance groups were lower than the corresponding groups in the comparative sample. Once again the AFS 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles) career group (97+ months) was lower than all other Vehicle Maintenance groups including the AFS 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles) first and second enlistment groups. A decrease from the second enlistment to the career group is also evident for the 472X1A (Special Vehicle Mechanic - Firetrucks) and 472X2 (General Purpose Vehicle Mechanic) specialties. In addition, less AFSs 472X1B (Special Vehicle Mechanic - Refueling Vehicles) and 472X3 (Vehicle Body Mechanic) second-enlistment group members perceived their training as being well utilized as first-enlistment and career group members in these two specialties. Once again, for the Vehicle Maintenance specialties, there is no clear increase in this indicator as time in service increases.

In terms of reenlistment intentions, the Vehicle Maintenance groups with the exception of AFS 472X3 (Vehicle Body Mechanic) were about equal to the corresponding groups in the comparative sample. With the exception of AFS

472X3 (Vehicle Body Mechanic) TAFMS groups, there was a definite increase in reenlistment intention with time in service. Most noticeable is the drastic increase in reenlistment intentions between the first- and second-enlistment groups. Of all the first-enlistment groups, AFS 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles) had the highest numbers of members intending to reenlist. The low reenlistment intention for the AFS 472X3 (Vehicle Body Mechanic) career group could be due to the inclusion of 7-skill level members and the retirement intentions of 27 percent of the members.

Although Vehicle Maintenance personnel generally responded positively on the job satisfaction indicators, the data indicated some areas of concern. In most studies of Air Force specialties, the tendency of satisfaction indicators is to rise from the first-enlistment group as personnel who have reenlisted once are more career oriented. Except for reenlistment intentions, this trend does not occur for all Vehicle Maintenance specialties. Since some Vehicle Maintenance specialties decline in second-enlistment or career group, job satisfaction figures may be cause for concern to career field and functional managers and may warrant further evaluation.

TABLE 19

JOB SATISFACTION INDICES FOR 472XX TAFMS GROUPS
(PERCENT RESPONDING)

	<u>JOB FAIRLY INTERESTING OR BETTER</u>	<u>TALENTS UTILIZED FAIRLY WELL OR BETTER</u>	<u>TRAINING UTILIZED FAIRLY WELL OR BETTER</u>	<u>FAVORABLY CONSIDERING REENLISTMENT</u>
<u>AFS 472X0</u>				
1-48 MOS TAFMS (N=172)	68	78	72	37
49-96 MOS TAFMS (N=118)	77	82	79	76
97+ MOS TAFMS (N=80)	71	77	79	84
<u>AFS 472X1A</u>				
1-48 MOS TAFMS (N=84)	87	94	86	46
49-96 MOS TAFMS (N=79)	89	92	87	64
97+ MOS TAFMS (N=26)	77	85	81	69
<u>AFS 472X1B</u>				
1-48 MOS TAFMS (N=96)	81	84	88	41
49-96 MOS TAFMS (N=41)	63	78	73	66
97+ MOS TAFMS (N=40)	80	87	87	84
<u>AFS 472X1C</u>				
1-48 MOS TAFMS (N=145)	72	81	75	38
49-96 MOS TAFMS (N=55)	82	85	73	80
97+ MOS TAFMS (N=30)	73	90	90	96
<u>AFS 472X1D</u>				
1-48 MOS TAFMS (N=144)	71	84	72	53
49-96 MOS TAFMS (N=46)	72	80	76	69
97+ MOS TAFMS (N=27)	56	74	59	81
<u>AFS 472X2</u>				
1-48 MOS TAFMS (N=557)	70	82	78	36
49-96 MOS TAFMS (N=293)	68	80	78	68
97+ MOS TAFMS (N=212)	69	76	71	76
<u>AFS 472X3*</u>				
1-48 MOS TAFMS (N=101)	74	82	80	39
49-96 MOS TAFMS (N=74)	72	88	73	64
97+ MOS TAFMS (N=307)	75	87	84	61
<u>COMPARATIVE SAMPLE**</u>				
1-48 MOS TAFMS (N=1392)	43	52	83	41
49-96 MOS TAFMS (N=352)	59	75	87	72
97+ MOS TAFMS (N=703)	72	83	88	71

* INCLUDES 7-SKILL LEVEL PERSONNEL.

** COMPARATIVE SAMPLE OF DIRECT SUPPORT CAREER LADDERS SURVEYED IN 1981 (INCLUDES AFSCs 566X0 AND 631X0)

ANALYSIS OF CONUS VERSUS OVERSEAS GROUPS

Comparisons were made of the tasks performed and background data for DAFSC 47250 (Base Vehicle Equipment Mechanic); 47251A/B/C/D (Special Vehicle Mechanic); 47252 (General Purpose Vehicle Mechanic); and 47253 (Vehicle Body Mechanic) personnel assigned to the Continental United States (CONUS) versus the members assigned to overseas locations. Of the different DAFSCs, more of the 47251A (Special Vehicle Mechanic - Firetrucks), 47251B (Special Vehicle Mechanic - Refueling Vehicles), 47251C (Special Vehicle Mechanic - Materials Handling Equipment), and 47253 (Vehicle Body Mechanic) members were assigned to overseas locations than members in DAFSC 47250 (Base Vehicle Equipment Mechanic), 47251D (Special Vehicle Mechanic - Towing and Servicing Vehicles), and 47252 (General Purpose Vehicle Mechanic) specialties (see Table 20). Overall, the job performed by CONUS and overseas members in each of the specialties was essentially the same. No noticeable trends in tasks performed or not performed were found with an assignment overseas.

As displayed in Table 20, comparison of background data revealed that overseas personnel in all of the specialties generally averaged more time in their career field and more time in service. Additionally, less of the overseas members were in their first enlistment. In terms of job satisfaction indicators, CONUS and overseas groups within each specialty were almost identical on perceived utilization of talents and training. The DAFSC 47251A (Special Vehicle Mechanic - Firetrucks), 47251B (Special Vehicle Mechanic - Refueling Vehicles), and 47251D (Special Vehicle Mechanic - Towing and Servicing Vehicles) overseas groups did not find their job as interesting as their CONUS counterparts. For the DAFSC 47250 (Base Vehicle Equipment Mechanic), 47251C (Special Vehicle Mechanic - Materials Handling Equipment), 47252 (General Purpose Vehicle Mechanic), and 47253 (Vehicle Body Mechanic), there was practically no difference in job interest between CONUS and overseas members. Finally, except for DAFSC 47250 (Base Vehicle Equipment Mechanic) and 47251C (Special Vehicle Mechanic - Materials Handling Equipment) where reenlistment intentions were identical for CONUS and overseas members, the trend was for more of the overseas members indicating plans to reenlist.

TABLE 20
SELECTED BACKGROUND INFORMATION FOR CONUS AND OVERSEAS GROUPS

	DAFSC 47250 CONUS MEMBERS (N=89)	DAFSC 47250 OVERSEAS MEMBERS (N=218)	DAFSC 47251A CONUS MEMBERS (N=85)	DAFSC 47251A OVERSEAS MEMBERS (N=65)	DAFSC 47251B CONUS MEMBERS (N=83)	DAFSC 47251B OVERSEAS MEMBERS (N=66)	DAFSC 47251C CONUS MEMBERS (N=101)	DAFSC 47251C OVERSEAS MEMBERS (N=76)
AVERAGE MONTHS TAFFS:	71	79	58	78	61	81	53	65
AVERAGE TIME IN CAREER FIELD (MONTHS):	56	64	40	60	48	68	46	55
PERCENT IN FIRST-ENLISTMENT:	42%	33%	40%	35%	59%	30%	62%	47%
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EXPRESSED JOB INTEREST: INTERESTING	70%	75%	93%	79%	87%	61%	74%	76%
PERCEIVED UTILIZATION OF TALENTS: FAIRLY WELL OR BETTER	80%	76%	88%	95%	88%	80%	84%	83%
PERCEIVED UTILIZATION OF TRAINING: FAIRLY WELL OR BETTER	76%	76%	86%	85%	86%	82%	79%	72%
REENLISTMENT INTENTIONS: PLAN TO REENLIST	63%	63%	47%	65%	52%	61%	58%	57%

PERCENT OF DAFSC 47250 MEMBERS ASSIGNED TO OVERSEAS LOCATIONS: 29%
 PERCENT OF DAFSC 47251A MEMBERS ASSIGNED TO OVERSEAS LOCATIONS: 43%
 PERCENT OF DAFSC 47251B MEMBERS ASSIGNED TO OVERSEAS LOCATIONS: 44%
 PERCENT OF DAFSC 47251C MEMBERS ASSIGNED TO OVERSEAS LOCATIONS: 43%

TABLE 20 (CONTINUED)

SELECTED BACKGROUND INFORMATION FOR CONUS AND OVERSEAS GROUPS

	DAFSC 47251D CONUS MEMBERS (N=136)	DAFSC 47251D OVERSEAS MEMBERS (N=45)	DAFSC 47252 CONUS MEMBERS (N=554)	DAFSC 47252 OVERSEAS MEMBERS (N=306)	DAFSC 47253 CONUS MEMBERS (N=95)	DAFSC 47253 OVERSEAS MEMBERS (N=73)
AVERAGE MONTHS TAFMS:	51	63	65	69	64	72
AVERAGE TIME IN CAREER FIELD (MONTHS):	42	55	52	58	46	57
PERCENT IN FIRST-ENLISTMENT:	65%	52%	49%	41%	45%	43%
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EXPRESSED JOB INTEREST:						
INTERESTING	71%	62%	68%	67%	72%	73%
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY WELL OR BETTER	86%	78%	79%	82%	83%	90%
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY WELL OR BETTER	74%	69%	74%	79%	79%	78%
REENLISTMENT INTENTIONS:						
PLAN TO REENLIST	57%	71%	53%	62%	51%	66%

PERCENT OF DAFSC 47251D MEMBERS ASSIGNED TO OVERSEAS LOCATIONS: 25%
 PERCENT OF DAFSC 47252 MEMBERS ASSIGNED TO OVERSEAS LOCATIONS: 36%
 PERCENT OF DAFSC 47253 MEMBERS ASSIGNED TO OVERSEAS LOCATIONS: 43%

ANALYSIS OF MAJOR COMMAND DIFFERENCES

Another possible dimension along which jobs performed by respondents may vary is major command (MAJCOM) assignment. Consequently, the major using commands of 472XX incumbents were examined in terms of tasks performed, vehicles worked on, background characteristics, and job satisfaction. The five commands examined across all specialties included TAC, SAC, USAFE, MAC, and PACAF. Differences between AAC and other commands was only examined for the 472X0 (Base Vehicle Equipment Mechanic), 472X1A (Special Vehicle Mechanic - Firetrucks), 472X1C (Special Vehicle Mechanic - Materials Handling Equipment), and 472X2 (General Purpose Vehicle Mechanic) personnel since sample sizes were very small for the other specialties. For ATC and AFSC, the differences between these commands and others could only be examined for the 472X0 (Base Vehicle Equipment Mechanic) and 472X2 (General Purpose Vehicle Mechanic) personnel due to small sample sizes in the other specialties.

Generally, job content within each specialty did not vary as a function of MAJCOM assignment. The only difference found in terms of tasks performed was for AFS 472X0 (Base Vehicle Equipment Mechanic) personnel assigned to AAC. As would be expected, more of these members removed, installed, or adjusted snowplow attachments and removed and installed winterization systems on vehicles. In terms of types and number of vehicles maintained, the only difference noted were that AFS 472X0 (Base Vehicle Equipment Mechanic) SAC, 472X1C (Special Vehicle Mechanic - Materials Handling Equipment) SAC and TAC, and 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles) SAC and PACAF members worked on a wider variety of different types of vehicles and equipment. These differences, however, were small and did not reflect major differences in the tasks performed by these members.

Differences in background data and job satisfaction across commands within each of the specialties did not reveal any large differences. The trend across most specialties was for members assigned to USAFE and PACAF to average more time in career field and more time in service. No trends in the job satisfaction indicators were found which were consistent across MAJCOMs for each of the specialties.

REVIEW OF WRITE-IN COMMENTS

As in most occupational surveys, respondents are invited to write in any comments they have relative to their jobs. In this survey, a number of individuals used the opportunity to address specific career ladder irritants. Generally, these comments involve the availability of parts and quality tools, assignment dissatisfaction, or training. While such comments may not reflect the opinion of a majority of career ladder members, they may be useful in pinpointing potential or existing problems in the field.

A major complaint seemed to be the lack of necessary parts and tools plus the quality of available tools. Many respondents reported that much of their job time was spent "parts chasing". Specific comments about tools and parts include:

"We are supposed to be professionals in our chosen field, but we are far from it. We have extremely poor tool box set ups. The tools that we have are in poor condition plus we have very limited selection. There is not one tool box that comes close to being complete. In simple terms, we have hardly any hand tools to work with. Our bench stock and tool crib has a very small selection of tools and parts that we need for every day use. This is my fourth base in which I have been assigned in my almost 10 years in the Air Force and it is the worst equipped shop that I have had to work in."

"We need new proper tools to do the proper jobs we are required to do."

"All jobs would be easier if the proper equipment was available to use in a serviceable manner."

"The updating of equipment would enable me to fulfill the mission in a much timelier manner and do it right the first time!"

"Because of the age and unusual nature of our equipment we must do a lot of manufacturing or 'adopting to make work' which is also a developed talent."

"Need more tools (special) for performance of job. Better system of obtaining parts..."

"51-60% of my weekly time is spent 'chasing parts'. I work at a satellite work center 15 minutes away from _____. Most of the time we don't have the parts needed to complete a job. This run is made 3 or more times a day. Very time consuming and frustrating because new parts are hardly in stock."

"Manufacturing parts because not readily available."

"I spend about 50% of my time modifying parts so they can be used on a vehicle due to the lack of parts."

A number of individuals reported dissatisfaction with their job either in terms of their place of assignment or in the actual job they performed. Examples of their write-in comments include:

"I feel that a 472XX MSgt should not be assigned to the Auto Hobby Shop. In my opinion it is a gross waste of Vehicle Maintenance management personnel. The Auto Hobby Shop should be managed by recreational people. Most of my time in the Auto Hobby Shop is used issuing tools and giving advice to patrons. My experience as a Vehicle Maintenance manager is wasted."

"I have been in the AFSC for 10 years. I have been assigned to Auto Hobby Shops for 8 years. I am thoroughly dissatisfied with the Vehicle Maintenance career field. Make no mistake! I am so dissatisfied, I have elected to cross train to another specialty."

"I am assigned to an Aerial Port Squadron and feel my technical knowledge and experience is being wasted jump-starting vehicles and minor maintenance. I am very dissatisfied at my job. There is no job satisfaction."

"I have not been allowed to paint trucks, cars, buses, etc. because our shop has a civilian painter and the only time I do get to paint is when the painter is on leave. The only things I get to paint is yellow equipment. The only way that I will reenlist would be if I can cross train into another career field before my four years are up. When I do cross train I will not train into the Vehicle Maintenance field.

"I feel more like a parts changer than a mechanic."

Finally, some respondents expressed a concern over the training received by members in their career field. These comments are as follows:

"It is my opinion that we are hurting in knowledge in the areas of emmission control, automatic transmissions, and pumping systems in structural trucks. Also, I feel that we could use more training in diesel engines. I feel that if we covered the material offered at Chanute more in depth I think it would benefit the career field greatly. I have seen people coming into the field or who have been in the field awhile encounter many difficulties because they were not taught enough or are not mechanically inclined to get along..."

"I think the Air Force should send more young airmen to advanced courses. I know sometimes I find myself lost in my career field because much of what I do was not covered in tech school and sometimes it's hard to grasp in the field. I would like to see more advanced school opportunities."

"...Need to train people to be able to perform more jobs. Too many people are specializing in certain areas and vehicles are out of service extra length of time because the only people who might fix vehicles are sick, vacation-other duties."

"...Need more 'OJT' time working under a mechanic with 5 or more years on the floor."

COMPARISON OF CURRENT SURVEY TO PREVIOUS SURVEYS

Besides the current study, surveys of the Vehicle Maintenance career field have been completed in 1968, 1972, and 1978. The results of the current study were compared to those of Occupational Survey Reports (OSR) AFPT 90-472-290, dated June 1978, and to AFPT 90-47X-067, dated April 1972. These three survey groups were compared on the job structure results and on job satisfaction data. Comparisons between the 1968 study and the three other surveys were not made due to differences in the 1968 report format and the lack of computer printouts for the 1968 study.

Table 21 displays the comparison of job groups between the 1982, 1978, and 1972 studies. Although some of the job group titles vary somewhat between the three studies, a close examination of the tasks performed by members of the corresponding groups and background data relative to these groups reveals no substantial change in overall job patterns over time. In all three studies, a large group of mechanics was identified which accounted for the majority of the survey sample. Additionally, within each study, the Vehicle Body Mechanics were identified as a separate group whose job was distinctly different from other mechanics. One minor difference between the 1978 study and the 1982 and 1972 studies was the separate identification of a Special Purpose Mechanic job group. Although this occurred, the discussion of the Special Purpose Mechanics in the 1978 report indicated a high degree of commonality between these mechanics and other vehicle mechanics in the study with differences traceable to either vehicles maintained or the vehicle specific equipment. The 1972 and 1982 studies also discussed vehicle and equipment difference of special purpose mechanics, although these two studies did not break them out into a separate cluster. Based on these comparisons, it was determined that most groups identified in the 1982 analysis could be traced back through the 1978 and 1972 studies, thus indicating an overall stability in the career field over time.

Examination of the job satisfaction indicators in Table 22 show minor differences between the three studies. The largest change has occurred in reenlistment intentions with more members favorably considering reenlistment in 1982 than in 1972. The other three indicators have remained relatively the same over time for the 3- and 5-skill level members in each of the specialties. A small decrease from the 1972 study to the 1982 study on job interest has occurred for the 7-skill level personnel. Generally, there has been little change in the job satisfaction indicators since the 1972 study, with job satisfaction remaining relatively high over time.

One finding which has been stressed in each of the three studies is the commonality between the jobs of vehicle mechanics (excluding the AFS 472X3 - Vehicle Body Mechanics). Each of the studies show a substantially large number of common general maintenance tasks performed by most vehicle mechanics. These tasks are performed by members regardless of the vehicles they maintained. Additionally, personnel sometimes maintained vehicles or equipment which were the responsibility of members in another specialty. The 1982 and 1978 studies point out that overlap on vehicles maintained and tasks performed is especially evident for AFSs 472X0 (Base Vehicle Equipment Mechanic), 472X1C (Special Vehicle Mechanic - Materials Handling Equipment),

and 472X1D (Special Vehicle Mechanic - Towing and Servicing Vehicles) (AFS 472X1D did not exist in 1972). In summary, comparisons of the three surveys demonstrates stability in the career field over the past decade.

TABLE 21
COMPARISON OF JOB GROUPS BETWEEN THE 1982, 1978, AND 1972 SURVEYS

<u>1982 SURVEY (N=3,162)</u>	<u>1978 SURVEY (N=2,945)</u>	<u>1972 SURVEY (N=3,338)</u>
VEHICLE REPAIR MECHANICS (N=2,155) GENERAL REPAIR MECHANICS (N=1,480) MINOR REPAIR FIREFIGHTING VEHICLE MECHANICS (N=48)	GENERAL MECHANICS (N=1,210) SPECIAL PURPOSE MECHANICS (N=328)	VEHICLE REPAIRMAN CLUSTER (N=2,003) MINOR MAINTENANCE SHOP REPAIRMAN (N=33)
VEHICLE BODY AND MINOR REPAIR MECHANICS (N=13) ENGINE AND MINOR REPAIR MECHANICS (N=39)		
MINOR REPAIR AND ADMINISTRATIVE PERSONNEL (N=16) REFUELING VEHICLE EQUIPMENT MECHANICS (N=38)		
QUALITY ASSURANCE PERSONNEL (N=74)	QUALITY CONTROL PERSONNEL (N=112)***	QUALITY CONTROL INSPECTOR (N=67)
TIRE SHOP PERSONNEL (N=71)	TIRE REPAIR PERSONNEL (N=87)*	TIRE REPAIRMAN (N=67)
VEHICLE BODY REPAIR PERSONNEL (N=216)	VEHICLE BODY REPAIR PERSONNEL (N=191)	BODY REPAIRMAN (N=200)
MANAGERIAL AND SUPERVISORY PERSONNEL (N=381)	SUPERVISORS (N=494)	GENERAL SUPERVISOR (N=134)*** VEHICLE MAINTENANCE NCOIC (N=67)
Maintenance CONTROLLERS (N=41)	Maintenance CONTROL CLERKS (N=161)***	MAINTENANCE CONTROLLER CLUSTER (N=234)
TRAINING PERSONNEL (N=83)	TRAINERS (N=49)**	INSTRUCTOR CLUSTER (N=67)

*JOE TYPE WITHIN THE GENERAL MECHANIC JOB CATEGORY

**JOB TYPE WITHIN AN ADMINISTRATIVE PERSONNEL JOB CATEGORY

***VARIOUS TYPES OF NCOICs WERE ALSO IDENTIFIED IN THE 1972 STUDY

TABLE 22
JOB SATISFACTION INDICES FOR CURRENT AND PREVIOUS SURVEYS
(PERCENT RESPONDING)

	<u>JOB FAIRLY INTERESTING OR BETTER</u>	<u>TALENTS** UTILIZED OR BETTER</u>	<u>TRAINING** UTILIZED OR BETTER</u>	<u>TALENTS AND** TRAINING UTILIZED FAIRLY WELL OR BETTER</u>	<u>FAVORABLY CONSIDERING REENLISTMENT</u>
472X0*					
1982 SURVEY (N=371)	71	79	76		60
1978 SURVEY (N=398)	70	80	74		55
1972 SURVEY (N=379)	69			79	35
472X1A*					
1982 SURVEY (N=189)	86	92	86		56
1978 SURVEY (N=133)	77	89	83		59
1972 SURVEY (N=152)	76			83	44
472X1B*					
1982 SURVEY (N=177)	77	84	84		55
1978 SURVEY (N=146)	79	90	84		61
1972 SURVEY (N=155)	77			85	45
472X1C*					
1982 SURVEY (N=230)	75	84	77		55
1978 SURVEY (N=164)	70	86	76		53
1972 SURVEY (N=150)	73			83	38
472X1D*					
1982 SURVEY (N=217)	69	82	71	***	59
1978 SURVEY (N=223)	70	81	66	***	45
472T1					
1982 SURVEY (N=333)	79	86	85		62
1978 SURVEY (N=283)	80	91	88		70
1972 SURVEY (N=206)	88			94	55

* INCLUDES 3- AND 5-SKILL LEVEL PERSONNEL

** PERCEIVED UTILIZATION OF TALENTS AND TRAINING WAS ONE QUESTION IN 1972

*** AFS 472X1D DID NOT EXIST IN 1972

TABLE 22 (CONTINUED)
JOB SATISFACTION INDICES FOR CURRENT AND PREVIOUS SURVEYS
(PERCENT RESPONDING)

	<u>JOB FAIRLY INTERESTING OR BETTER</u>	<u>TALENTS** UTILIZED FAIRLY WELL OR BETTER</u>	<u>TRAINING** UTILIZED FAIRLY WELL OR BETTER</u>	<u>TALENTS AND** TRAINING UTILIZED FAIRLY WELL OR BETTER</u>	<u>FAVORABLY CONSIDERING REENLISTMENT</u>
472X2*					
1982 SURVEY (N=1,062)	69	80	76		53
1978 SURVEY (N=951)	66	79	73		54
1972 SURVEY (N=1,359)	59			77	29
472X3*					
1982 SURVEY (N=203)	73	86	78		55
1978 SURVEY (N=192)	70	86	78		54
1972 SURVEY (N=295)	63			78	30
47273					
1982 SURVEY (N=280)	75	86	83		59
1978 SURVEY (N=249)	76	81	80		66
1972 SURVEY (N=294)	83			91	51

*INCLUDES 3- AND 5-SKILL LEVEL PERSONNEL
**PERCEIVED UTILIZATION OF TALENTS AND TRAINING WAS ONE QUESTION IN 1972
***AFS 472X1D DID NOT EXIST IN 1972

SUMMARY AND IMPLICATIONS

In summary, the data in this report shows:

1. A very large number of tasks performed in common by all the specialties, except AFS 472X3.
2. AFS 472X1A, B, C, 472X2, and 472X3 incumbents are performing tasks consistent with the requirements of the specialties, although they also perform tasks of other specialties.
3. Few tasks in the AFS 472X0 and 472X1D specialties are performed by as many as 30 percent of the incumbents.
4. As many incumbents of AFS 472X0 and 472X1D are performing tasks belonging to other specialties as they are performing tasks for their respective specialties.
5. Some overlapping performance of tasks belonging to other specialties by AFS 472X1C incumbents.
6. Previous experience, as represented by career ladder progression, affects the utilization of DAFSC 47273 personnel.
7. Findings of the current occupational analysis replicate the results of previous analyses in 1972 and 1978.

Implications that can be drawn from these findings are as follows:

1. Cross-utilization of personnel among specialty jobs is widespread; the limitation imposed is seemingly one of location of the shops.
2. Utilization is not as clearly in line with career ladder structure as is normally the case where separate ladders and shreds are operating.
3. The greatest utilization problem for consistency with career ladder structure concerns AFS 472X0 and 472X1D incumbents.
4. Cost-effectiveness of initial training based on the ladder and shred designations is brought into question for AFS 472X0 and 472X1D. Similarly, consolidation of the ladders and shreds, or some combination of them, would broaden the training requirements and would, perhaps, not solve the cost-effectiveness problem.
5. The AFS 472X2 and 472X3 merger at the 7-skill level may not be functioning as expected. If the objective was to create a general supervisor, this expectation is not occurring. If the objective was to develop a technical supervisor, then the merger is partially functional. To fully develop a technical supervisor might require a separate 7-skill level for AFS 472X3. The issue to be resolved is what kind of supervisor is desired. If a general supervisor is needed, then some management action to broaden the individual becoming 7-skill level needs to be taken.

Conclusion: Some reorganization of the career ladder structure is warranted. AFS 472X0 and 472X1D are excellent candidates for merging. Consolidation or shredding other specialties would be questionable, and should occur only after careful consideration of:

1. The need to get the right skills and experience for the specialized equipment repair to support operational units; and
2. The impact on initial and on-the-job training of a reorganization, including the cost-effectiveness of broadening or narrowing the specialty structure.

APPENDIX A

**BACKGROUND INFORMATION, JOB SATISFACTION DATA,
REPRESENTATIVE TASKS PERFORMED, TOOLS AND EQUIPMENT USED,
AND VEHICLES MAINTAINED FOR JOB GROUPS**

TABLE A1

BACKGROUND INFORMATION FOR JOB TYPES WITHIN THE QUALITY ASSURANCE PERSONNEL,
VEHICLE BODY REPAIR PERSONNEL AND TRAINING PERSONNEL CLUSTERS

QUALITY ASSURANCE PERSONNEL				VEHICLE BODY REPAIR PERSONNEL				TRAINING PERSONNEL			
QUALITY CONTROL INSPECTORS (GRP257)	DIAGNOSTIC INSPECTORS (GRP253)	VEHICLE BODY REPAIR SECTION SUPERVISORS (GRP797)	VEHICLE BODY REPAIR WORKERS (GRP767)	UNIT TRAINING MONITORS (GRP276)	TECHNICAL TRAINING INSTRUCTORS (GRP259)	UNIT TRAINING MONITORS (GRP276)	TECHNICAL TRAINING INSTRUCTORS (GRP259)				
26	39	48	142	31	19	30	18				
44	79	101	49	E-5	E-5/E-6	E-5	E-5/E-6				
E-4/E-5	E-5/E-6	E-4/E-5	E-3/E-4	36%	36%	16%	-				
39%	33%	38%									
DAFSC DISTRIBUTION											
47230/47250	12%	15%	2%	1%	10%	10%	-				
47231A/47251A	4%	-	2%	-	-	-	-				
47231B/47251B	-	-	-	-	-	-	-				
47231C/47251C	4%	-	-	-	-	-	16%				
47231D/47251D	7%	-	-	1%	-	-	5%				
47232/47252	46%	23%	4%	3%	6%	42%	11%				
47233/47253	4%	-	54%	94%	-	-	-				
47271	19%	36%	-	-	29%	37%	-				
47273	4%	26%	38%	1%	13%	13%	21%				
PERCENT SUPERVISING:											
PERCENT MONTHS TAFFED:	31%	75%	73%	15%	19%	19%	5%				
AVERAGE TIME IN CAREER FIELD (MONTHS):	110	160	98	55	151	150					
PERCENT IN FIRST ENLISTMENT:	89	133	78	41	133	141	5%				
	19%	3%	17%	58%	13%						

TABLE A2

JOB SATISFACTION INDICATORS FOR JOB TYPES WITHIN THE QUALITY ASSURANCE PERSONNEL,
 VEHICLE BODY REPAIR PERSONNEL AND TRAINING PERSONNEL CLUSTERS
 (PERCENT RESPONDING)*

<u>QUALITY ASSURANCE PERSONNEL</u>	<u>VEHICLE BODY REPAIR PERSONNEL</u>			<u>TRAINING PERSONNEL</u>		
	<u>VEHICLE BODY REPAIR</u>	<u>VEHICLE SECTION SUPERVISORS</u>	<u>BODY REPAIR WORKERS</u>	<u>UNIT TRAINING MONITORS</u>	<u>TECHNICAL TRAINING INSTRUCTORS</u>	<u>(GRP259)</u>
<u>EXPRESSED JOB INTEREST:</u>						
DULL	15%	13%	2%	9%	3%	11%
SO-SO	19%	20%	15%	18%	3%	16%
INTERESTING	65%	67%	83%	73%	90%	68%
<u>PERCEIVED UTILIZATION OF TALENTS:</u>						
LITTLE OR NOT AT ALL	19%	20%	8%	13%	3%	11%
FAIRLY WELL OR BETTER	81%	80%	92%	86%	94%	89%
<u>PERCEIVED UTILIZATION OF TRAINING:</u>						
LITTLE OR NOT AT ALL	31%	15%	17%	18%	6%	11%
FAIRLY WELL OR BETTER	65%	85%	83%	81%	94%	89%
<u>REENLISTMENT INTENTIONS:</u>						
PLAN TO RETIRE	12%	18%	2%	1%	23%	26%
PLAN NOT TO REENLIST	19%	23%	21%	51%	13%	11%
PLAN TO REENLIST	69%	59%	77%	47%	61%	63%

*SOME COLUMNS DO NOT TOTAL 100% DUE TO OMITTED RESPONSES

TABLE A.3
BACKGROUND INFORMATION FOR JOB TYPES WITHIN THE MANAGERIAL AND SUPERVISORY PERSONNEL CLUSTER

TABLE A4

JOB SATISFACTION INDICATORS FOR JOB TYPES WITHIN THE
 MANAGERIAL AND SUPERVISORY PERSONNEL CLUSTER
 (PERCENT RESPONDING)*

MANAGERIAL AND SUPERVISORY PERSONNEL				VEHICLE MAINTENANCE			
VEHICLE MAINTENANCE SUPERINTENDENTS (GRP1090)	SUPPORT SECTION NCOICs (GRP1121)	MAINTENANCE CONTROL NCOICs (GRP480)	SHOP NCOICs (GRP260)	FIRST LINE SUPERVISORS (GRP176)	MAINTENANCE INSPECTORS (GRP538)	VEHICLE MAINTENANCE MANAGERS (GRP161)	
<u>EXPRESSED JOB INTEREST:</u>							
DULL	-	8%	10%	7%	2%	-	-
SO-SO	2%	8%	-	9%	6%	-	-
INTERESTING	96%	76%	90%	84%	91%	100%	100%
<u>PERCEIVED UTILIZATION OF TALENTS:</u>							
LITTLE OR NOT AT ALL	2%	12%	15%	9%	9%	-	-
FAIRLY WELL OR BETTER	98%	88%	85%	91%	89%	100%	100%
<u>PERCEIVED UTILIZATION OF TRAINING:</u>							
LITTLE OR NOT AT ALL	4%	4%	20%	13%	4%	-	-
FAIRLY WELL OR BETTER	96%	92%	80%	86%	94%	100%	100%
<u>REENLISTMENT INTENTIONS:</u>							
PLAN TO RETIRE	37%	36%	15%	33%	25%	29%	47%
PLAN NOT TO REENLIST	10%	20%	15%	9%	7%	14%	-
PLAN TO REENLIST	51%	44%	70%	55%	66%	57%	53%

*SOME COLUMNS DO NOT TOTAL 100% DUE TO OMITTED RESPONSES

TABLE A5
REPRESENTATIVE TASKS PERFORMED BY
GENERAL REPAIR MECHANICS
(GRP403)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=1480)</u>
I288 REMOVE OR INSTALL BATTERIES	97
I308 REMOVE OR INSTALL SPARK PLUGS	97
I268 INSPECT LIGHTING SYSTEMS	97
0522 ADJUST PARKING BRAKES	97
I269 INSPECT STARTING SYSTEMS	97
I266 INSPECT CHARGING SYSTEMS	96
H215 ADJUST ENGINE DRIVE BELTS	96
I287 REMOVE OR INSTALL ALTERNATORS	96
H244 SERVICE AIR CLEANERS	96
N484 PACK WHEEL BEARINGS	95
I299 REMOVE OR INSTALL IGNITION POINTS	95
I267 INSPECT IGNITION SYSTEMS	95
I317 SET IGNITION TIMING	95
I257 ADJUST IGNITION POINTS USING FEELER GAUGES	95
L424 REMOVE OR INSTALL RADIATORS	94
0523 ADJUST SERVICE BRAKES	94
N499 REMOVE OR INSTALL FRONT WHEEL BEARINGS	94
I298 REMOVE OR INSTALL IGNITION COILS	93
L423 REMOVE OR INSTALL HEATING OR COOLING SYSTEM HOSES	93
K378 REMOVE OR INSTALL CARBURETORS	93
I265 INSPECT BATTERIES	93
I297 REMOVE OR INSTALL GENERATORS OR STARTER MOTORS	92
I311 REMOVE OR INSTALL VEHICLE LIGHT ASSEMBLIES	92
I315 SERVICE BATTERIES	92
I279 ISOLATE STARTER SYSTEM MALFUNCTIONS	92
0525 BLEED OR FLUSH BRAKE SYSTEMS	92
K350 ADJUST CARBURETOR FUEL MIXTURES	92
I282 PERFORM BATTERY HYDROMETER TESTS	92
H220 INSPECT MOTOR MOUNTS	91
K395 SERVICE FUEL FILTERS	91
0545 REMOVE OR INSTALL BRAKE SHOES	91
L430 TEST STRENGTH OF ANTIFREEZE SOLUTIONS	91
H227 REMOVE OR INSTALL ENGINE DRIVE BELTS	91
I314 REMOVE OR INSTALL VOLTAGE REGULATORS	91
I293 REMOVE OR INSTALL ELECTRICAL SYSTEM SWITCHES	90
I273 ISOLATE CHARGING SYSTEM MALFUNCTIONS	90
L426 REMOVE OR INSTALL WATER PUMPS	90
H245 SERVICE ENGINE DRIVE BELTS	90
H219 INSPECT ENGINE PARTS	90

TABLE A6

**REPRESENTATIVE TASKS PERFORMED BY
GENERAL REPAIR FIREFIGHTING VEHICLE MECHANICS
(GRP1043)**

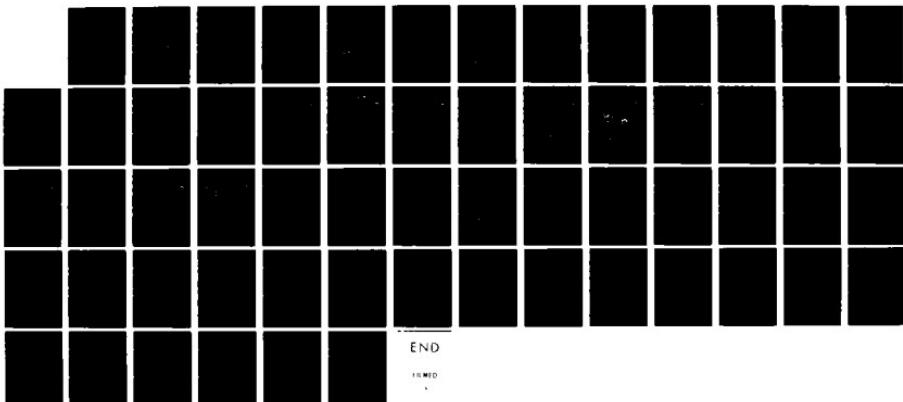
<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=97)</u>
R615 ADJUST FIREFIGHTING PUMP PACKINGS	100
N499 REMOVE OR INSTALL FRONT WHEEL BEARINGS	100
I308 REMOVE OR INSTALL SPARK PLUGS	99
I268 INSPECT LIGHTING SYSTEMS	99
R629 ISOLATE FIREFIGHTING PUMPING SYSTEM MALFUNCTIONS	99
R641 REMOVE OR INSTALL FIREFIGHTING EQUIPMENT TURRET CONTROL CABLES	99
I269 INSPECT STARTING SYSTEMS	99
I288 REMOVE OR INSTALL BATTERIES	99
R627 ISOLATE FIREFIGHTING EQUIPMENT TURRET ELECTRICAL SYSTEM MALFUNCTIONS	99
H215 ADJUST ENGINE DRIVE BELTS	99
I303 REMOVE OR INSTALL PRESSURE SENDING UNITS	99
R614 ADJUST FIREFIGHTING EQUIPMENT TURRET HYDRAULIC SYSTEM COMPONENTS	98
I299 REMOVE OR INSTALL IGNITION POINTS	98
H244 SERVICE AIR CLEANERS	98
I317 SET IGNITION TIMING	98
I307 REMOVE OR INSTALL SOLENOIDS	98
N484 PACK WHEEL BEARINGS	98
R628 ISOLATE FIREFIGHTING EQUIPMENT TURRET HYDRAULIC SYSTEM MALFUNCTIONS	97
I266 INSPECT CHARGING SYSTEMS	97
I267 INSPECT IGNITION SYSTEMS	97
I257 ADJUST IGNITION POINTS USING FEELER GAUGES	97
I273 ISOLATE CHARGING SYSTEM MALFUNCTIONS	97
I311 REMOVE OR INSTALL VEHICLE LIGHT ASSEMBLIES	97
I282 PERFORM BATTERY HYDROMETER TESTS	97
R622 INSPECT FIREFIGHTING EQUIPMENT WATER OR FOAM TANKS	97
I309 REMOVE OR INSTALL TERMINAL BLOCKS, FUSE HOLDERS, RESISTORS, OR CIRCUIT BREAKERS	97
0525 BLEED OR FLUSH BRAKE SYSTEMS	97
0527 INSPECT AIR BRAKE SYSTEM COMPONENTS	97
K355 ADJUST THROTTLE LINKAGES	97
0544 REMOVE OR INSTALL BRAKE HOSES OR LINES	97
I271 INTERPRET ELECTRICAL SYSTEM DIAGRAMS OR SCHEMATICS	96
I270 INSPECT WARNING SYSTEMS	96
I293 REMOVE OR INSTALL ELECTRICAL SYSTEM SWITCHES	91

AD-A120 495 BASE VEHICLE EQUIPMENT SPECIAL VEHICLE GENERAL PURPOSE 2/2
VEHICLE AND VEHICL. (U) AIR FORCE OCCUPATIONAL
MEASUREMENT CENTER RANDOLPH AFB TX AUG 82

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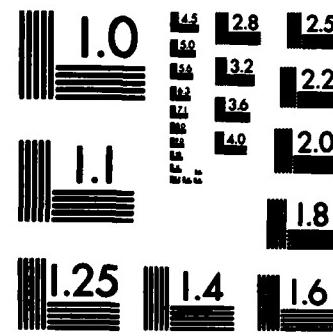
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END

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TABLE A7

**REPRESENTATIVE TASKS PERFORMED BY
GENERAL REPAIR REFUELING VEHICLE MECHANICS
(GRP677)**

TASKS	PERCENT MEMBERS PERFORMING (N=132)
S689 REMOVE OR INSTALL REFUELING HOSES	100
S672 PERFORM REFUELING HOSE HYDROSTATIC TESTS	100
S688 REMOVE OR INSTALL REFUELING EQUIPMENT VITONIC COUPLINGS	100
S675 PERFORM STATIC GROUND REEL CONTINUITY TESTS	98
I308 REMOVE OR INSTALL SPARK PLUGS	98
I288 REMOVE OR INSTALL BATTERIES	98
I266 INSPECT CHARGING SYSTEMS	98
S667 INSPECT REFUELING EQUIPMENT TANK MOUNTINGS	98
S682 REMOVE OR INSTALL REFUELING EQUIPMENT FILTERS	98
I265 INSPECT LIGHTING SYSTEMS	98
S693 REMOVE OR INSTALL STATIC DISCHARGE REELS	98
S686 REMOVE OR INSTALL REFUELING EQUIPMENT LINE STRAINERS	98
I257 ADJUST IGNITION POINTS USING FEELER GAUGES	98
I267 INSPECT IGNITION SYSTEMS	98
S662 CALIBRATE REFUELING METERS	97
S659 ADJUST REFUELING EQUIPMENT DISPENSING SYSTEM VALVES	97
S661 ADJUST REFUELING EQUIPMENT HOSE REEL COMPONENTS	97
S681 REMOVE OR INSTALL REFUELING EQUIPMENT DISPENSING SYSTEM VALVES	97
S666 DISASSEMBLE OR ASSEMBLE REFUELING PUMP ASSEMBLIES	97
I269 INSPECT STARTING SYSTEMS	97
H215 ADJUST ENGINE DRIVE BELTS	97
I287 REMOVE OR INSTALL ALTERNATORS	97
S664 DISASSEMBLE OR ASSEMBLE REFUELING EQUIPMENT DISPENSING SYSTEM VALVES	96
I299 REMOVE OR INSTALL IGNITION POINTS	96
H244 SERVICE AIR CLEANERS	96
S684 REMOVE OR INSTALL REFUELING EQUIPMENT HOSE REEL DRIVE COMPONENTS	96
0522 ADJUST PARKING BRAKES	96
S671 ISOLATE REFUELING METER MALFUNCTIONS	95
S691 REMOVE OR INSTALL REFUELING PUMP ASSEMBLIES	95
S670 ISOLATE REFUELING EQUIPMENT DISPENSING SYSTEM MALFUNCTIONS	95
S690 REMOVE OR INSTALL REFUELING METER COMPONENTS	95
N484 PACK WHEEL BEARINGS	95
S665 DISASSEMBLE OR ASSEMBLE REFUELING EQUIPMENT HOSE REEL COMPONENTS	94
I317 SET IGNITION TIMING	94

TABLE A6

**REPRESENTATIVE TASKS PERFORMED BY
GENERAL REPAIR FIREFIGHTING VEHICLE MECHANICS
(GRP1043)**

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=97)</u>
R615 ADJUST FIREFIGHTING PUMP PACKINGS	100
N499 REMOVE OR INSTALL FRONT WHEEL BEARINGS	100
I308 REMOVE OR INSTALL SPARK PLUGS	99
I268 INSPECT LIGHTING SYSTEMS	99
R629 ISOLATE FIREFIGHTING PUMPING SYSTEM MALFUNCTIONS	99
R641 REMOVE OR INSTALL FIREFIGHTING EQUIPMENT TURRET CONTROL CABLES	99
I269 INSPECT STARTING SYSTEMS	99
I288 REMOVE OR INSTALL BATTERIES	99
R627 ISOLATE FIREFIGHTING EQUIPMENT TURRET ELECTRICAL SYSTEM MALFUNCTIONS	99
H215 ADJUST ENGINE DRIVE BELTS	99
I303 REMOVE OR INSTALL PRESSURE SENDING UNITS	99
R614 ADJUST FIREFIGHTING EQUIPMENT TURRET HYDRAULIC SYSTEM COMPONENTS	98
I299 REMOVE OR INSTALL IGNITION POINTS	98
H244 SERVICE AIR CLEANERS	98
I317 SET IGNITION TIMING	98
I307 REMOVE OR INSTALL SOLENOIDS	98
N484 PACK WHEEL BEARINGS	98
R628 ISOLATE FIREFIGHTING EQUIPMENT TURRET HYDRAULIC SYSTEM MALFUNCTIONS	97
I266 INSPECT CHARGING SYSTEMS	97
I267 INSPECT IGNITION SYSTEMS	97
I257 ADJUST IGNITION POINTS USING FEELER GAUGES	97
I273 ISOLATE CHARGING SYSTEM MALFUNCTIONS	97
I311 REMOVE OR INSTALL VEHICLE LIGHT ASSEMBLIES	97
I282 PERFORM BATTERY HYDROMETER TESTS	97
R622 INSPECT FIREFIGHTING EQUIPMENT WATER OR FOAM TANKS	97
I309 REMOVE OR INSTALL TERMINAL BLOCKS, FUSE HOLDERS, RESISTORS, OR CIRCUIT BREAKERS	97
0525 BLEED OR FLUSH BRAKE SYSTEMS	97
0527 INSPECT AIR BRAKE SYSTEM COMPONENTS	97
K355 ADJUST THROTTLE LINKAGES	97
0544 REMOVE OR INSTALL BRAKE HOSES OR LINES	97
I271 INTERPRET ELECTRICAL SYSTEM DIAGRAMS OR SCHEMATICS	96
I270 INSPECT WARNING SYSTEMS	96
I293 REMOVE OR INSTALL ELECTRICAL SYSTEM SWITCHES	96

TABLE A8
REPRESENTATIVE TASKS PERFORMED BY
SERVICING EQUIPMENT MECHANICS
(GRP1263)

TASKS	PERCENT MEMBERS PERFORMING (N=15)
H244 SERVICE AIR CLEANERS	100
I257 ADJUST IGNITION POINTS USING FEELER GAUGES	100
I288 REMOVE OR INSTALL BATTERIES	100
J329 ISOLATE HYDRAULIC SYSTEM MALFUNCTIONS	100
I308 REMOVE OR INSTALL SPARK PLUGS	100
K395 SERVICE FUEL FILTERS	100
J337 REMOVE OR INSTALL HYDRAULIC CYLINDERS	100
H246 SERVICE ENGINE OIL SYSTEMS	100
U725 INSPECT SERVICING EQUIPMENT BOOM ASSEMBLIES	100
I299 REMOVE OR INSTALL IGNITION POINTS	100
I268 INSPECT LIGHTING SYSTEMS	100
N499 REMOVE OR INSTALL FRONT WHEEL BEARINGS	100
N484 PACK WHEEL BEARINGS	100
U717 ADJUST SERVICING EQUIPMENT BOOM ASSEMBLY CONTROLS	100
I277 ISOLATE LIGHTING SYSTEM MALFUNCTIONS	100
I293 REMOVE OR INSTALL ELECTRICAL SYSTEM SWITCHES	100
0523 ADJUST SERVICE BRAKES	100
0529 INSPECT HYDRAULIC BRAKE SYSTEM COMPONENTS	100
0534 ISOLATE HYDRAULIC BRAKE SYSTEM MALFUNCTIONS	100
0545 REMOVE OR INSTALL BRAKE SHOES	100
I270 INSPECT WARNING SYSTEMS	100
U718 ADJUST SERVICING EQUIPMENT BOOM ASSEMBLY SAFETY DEVICES	100
I298 REMOVE OR INSTALL IGNITION COILS	100
H228 REMOVE OR INSTALL ENGINES	100
K355 ADJUST THROTTLE LINKAGES	100
N497 REMOVE OR INSTALL DRIVE SHAFTS	100
0549 REMOVE OR INSTALL MASTER CYLINDERS	100
G193 LUBRICATE VEHICLES	93
H219 INSPECT ENGINE PARTS	93
H215 ADJUST ENGINE DRIVE BELTS	93
J326 INSPECT HYDRAULIC SYSTEM COMPONENTS	93
I265 INSPECT BATTERIES	93
U724 INSPECT SERVICING EQUIPMENT AERIAL WORK PLATFORMS	93
I267 INSPECT IGNITION SYSTEMS	93
I266 INSPECT CHARGING SYSTEMS	93
I269 INSPECT STARTING SYSTEMS	93
I317 SET IGNITION TIMING	93
I315 SERVICE BATTERIES	93

TABLE A9
REPRESENTATIVE TASKS PERFORMED BY
UNIT MECHANICS
(N=33)

TASKS	PERCENT NUMBERS PERFORMING (N=33)
I268 INSPECT LIGHTING SYSTEMS	100
L430 TEST STRENGTH OF ANTIFREEZE SOLUTIONS	100
I266 INSPECT CHARGING SYSTEMS	100
I308 REMOVE OR INSTALL SPARK PLUGS	100
I269 INSPECT STARTING SYSTEMS	100
H244 SERVICE AIR CLEANERS	97
N484 PACK WHEEL BEARINGS	97
I265 INSPECT BATTERIES	97
H215 ADJUST ENGINE DRIVE BELTS	97
I315 SERVICE BATTERIES	97
0522 ADJUST PARKING BRAKES	97
N499 REMOVE OR INSTALL FRONT WHEEL BEARINGS	97
I317 SET IGNITION TIMING	97
C110 ROAD-TEST VEHICLES	94
K395 SERVICE FUEL FILTERS	94
I267 INSPECT IGNITION SYSTEMS	94
I264 CHARGE BATTERIES	94
0525 BLEED OR FLUSH BRAKE SYSTEMS	94
I299 REMOVE OR INSTALL IGNITION POINTS	94
G193 LUBRICATE VEHICLES	91
I288 REMOVE OR INSTALL BATTERIES	91
0523 ADJUST SERVICE BRAKES	91
I282 PERFORM BATTERY HYDROMETER TESTS	91
N474 ADJUST WHEEL BEARINGS	88
I270 INSPECT WARNING SYSTEMS	88
C77 CONDUCT VEHICLE LIMITED TECHNICAL INSPECTIONS (LTI)	88
I316 SERVICE BATTERY CARRIER ASSEMBLIES	88
I257 ADJUST IGNITION POINTS USING FEELER GAUGES	88
K350 ADJUST CARBURETOR FUEL MIXTURES	88
0545 REMOVE OR INSTALL BRAKE SHOES	88
0552 REMOVE OR INSTALL WHEEL CYLINDERS	88
F175 RESEARCH FEDERAL STOCK NUMBERS OR PART NUMBERS	85
N500 REMOVE OR INSTALL GREASE SEALS	85
N480 INSPECT DRIVE SHAFT COMPONENTS	85
I287 REMOVE OR INSTALL ALTERNATORS	85
I297 REMOVE OR INSTALL GENERATORS OR STARTER MOTORS	85
0544 REMOVE OR INSTALL BRAKE HOSES OR LINES	85
I314 REMOVE OR INSTALL VOLTAGE REGULATORS	85
K378 REMOVE OR INSTALL CARBURETORS	85

TABLE A10
REPRESENTATIVE TASKS PERFORMED BY
VEHICLE MECHANIC SECTION SUPERVISORS
(GRP417)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=87)</u>
I269 INSPECT STARTING SYSTEMS	100
I268 INSPECT LIGHTING SYSTEMS	99
I267 INSPECT IGNITION SYSTEMS	99
I266 INSPECT CHARGING SYSTEMS	99
I288 REMOVE OR INSTALL BATTERIES	98
I293 REMOVE OR INSTALL ELECTRICAL SYSTEM SWITCHES	98
C99 INSPECT TOOLS	97
I265 INSPECT BATTERIES	97
I270 INSPECT WARNING SYSTEMS	97
I287 REMOVE OR INSTALL ALTERNATORS	97
I264 CHARGE BATTERIES	97
H246 SERVICE ENGINE OIL SYSTEMS	97
H219 INSPECT ENGINE PARTS	95
H215 ADJUST ENGINE DRIVE BELTS	95
H244 SERVICE AIR CLEANERS	95
I279 ISOLATE STARTER SYSTEM MALFUNCTIONS	95
I282 PERFORM BATTERY HYDROMETER TESTS	95
I299 REMOVE OR INSTALL IGNITION POINTS	95
C110 ROAD-TEST VEHICLES	94
I308 REMOVE OR INSTALL SPARK PLUGS	94
H245 SERVICE ENGINE DRIVE BELTS	94
I257 ADJUST IGNITION POINTS USING FEELER GAUGES	94
H247 SERVICE POSITIVE CRANKCASE VENTILATION SYSTEMS	94
I317 SET IGNITION TIMING	94
I298 REMOVE OR INSTALL IGNITION COILS	94
C72 ANALYZE CAUSES OF VEHICLE FAILURES	93
I271 INTERPRET ELECTRICAL SYSTEM DIAGRAMS OR SCHEMATICS	93
I315 SERVICE BATTERIES	93
A3 DETERMINE WORK PRIORITIES	92
C77 CONDUCT VEHICLE LIMITED TECHNICAL INSPECTIONS (LTI)	92
I277 ISOLATE LIGHTING SYSTEM MALFUNCTIONS	92
H220 INSPECT MOTOR MOUNTS	92
I297 REMOVE OR INSTALL GENERATORS OR STARTER MOTORS	92
I311 REMOVE OR INSTALL VEHICLE LIGHT ASSEMBLIES	92
I290 REMOVE OR INSTALL DISTRIBUTORS	92
L424 REMOVE OR INSTALL RADIATORS	92
B33 COUNSEL PERSONNEL ON PERSONAL OR MILITARY MATTERS	91
I273 ISOLATE CHARGING SYSTEM MALFUNCTIONS	91

TABLE AII
REPRESENTATIVE TASKS PERFORMED BY
MINOR REPAIR FIREFIGHTING VEHICLE MECHANICS
(GMP381)

TASKS	PERCENT MEMBERS PERFORMING (N=48)
I308 REMOVE OR INSTALL SPARK PLUGS	100
H244 SERVICE AIR CLEANERS	98
I288 REMOVE OR INSTALL BATTERIES	94
H215 ADJUST ENGINE DRIVE BELTS	94
O522 ADJUST PARKING BRAKES	94
I293 REMOVE OR INSTALL ELECTRICAL SYSTEM SWITCHES	92
I257 ADJUST IGNITION POINTS USING FEELER GAUGES	92
O525 BLEED OR BLUSH BRAKE SYSTEMS	92
H227 REMOVE OR INSTALL ENGINE DRIVE BELTS	92
I266 INSPECT LIGHTING SYSTEMS	90
N484 PACK WHEEL BEARINGS	90
I271 INTERPRET ELECTRICAL SYSTEM DIAGRAMS OR SCHEMATIC	88
R615 ADJUST FIREFIGHTING PUMP PACKINGS	88
I299 REMOVE OR INSTALL IGNITION POINTS	88
O523 ADJUST SERVICE BRAKES	88
I269 INSPECT STARTING SYSTEMS	86
I279 ISOLATE STARTER SYSTEM MALFUNCTIONS	86
I311 REMOVE OR INSTALL VEHICLE LIGHT ASSEMBLIES	86
I266 INSPECT CHARGING SYSTEMS	83
I270 INSPECT WARNING SYSTEMS	83
I317 SET IGNITION TIMING	83
O545 REMOVE OR INSTALL BRAKE SHOES	83
L423 REMOVE OR INSTALL HEATING OR COOLING SYSTEM HOSES	83
G193 LUBRICATE VEHICLES	81
K395 SERVICE FUEL FILTERS	81
I267 INSPECT IGNITION SYSTEMS	81
I287 REMOVE OR INSTALL ALTERNATORS	81
K350 ADJUST CARBURETOR FUEL MIXTURES	81
M433 ADJUST CLUTCH PEDAL FREE PLAY	81
I277 ISOLATE LIGHTING SYSTEM MALFUNCTIONS	79
O521 ADJUST MECHANICAL BRAKE LINKAGE OR CABLES	79
R628 ISOLATE FIREFIGHTING EQUIPMENT TURRET HYDRAULIC SYSTEM MALFUNCTIONS	77
R627 ISOLATE FIREFIGHTING EQUIPMENT TURRET ELECTRICAL SWITCH MALFUNCTIONS	77
R622 INSPECT FIREFIGHTING EQUIPMENT WATER OR FOAM TANKS	77
I282 PERFORM BATTERY HYDROMETER TESTS	77
H246 SERVICE ENGINE OIL SYSTEMS	75
I265 INSPECT BATTERIES	75

TABLE A12
REPRESENTATIVE TASKS PERFORMED BY
VEHICLE BODY AND MINOR REPAIR MECHANICS
(GRP409)

TASKS	PERCENT MEMBERS PERFORMING (N=13)
G197 OPERATE CUTTING TORCHES	100
V740 ADJUST HINGES OR LOCKING MECHANISMS	100
I257 ADJUST IGNITION POINTS USING FEELER GAUGES	100
L424 REMOVE OR INSTALL RADIATORS	100
I308 REMOVE OR INSTALL SPARK PLUGS	92
V749 INSPECT DAMAGED BODY SECTIONS	92
N484 PACK WHEEL BEARINGS	92
G193 LUBRICATE VEHICLES	92
0522 ADJUST PARKING BRAKES	92
V741 APPLY BODY FILLERS	92
I317 SET IGNITION TIMING	92
I299 REMOVE OR INSTALL IGNITION POINTS	92
K385 REMOVE OR INSTALL EXHAUST SYSTEM COMPONENTS	92
0525 BLEED OR FLUSH BRAKE SYSTEMS	92
H215 ADJUST ENGINE DRIVE BELTS	92
I287 REMOVE OR INSTALL ALTERNATORS	92
V753 PAINT VEHICLE BODY SURFACES	85
V755 PREPARE VEHICLE BODY SURFACES FOR PAINTING	85
I265 INSPECT BATTERIES	85
V761 REMOVE OR INSTALL LOCKS OR LATCHES	85
V772 STRAIGHTEN DISTORTED PANELS, DOORS, OR FENDERS	85
V742 APPLY LETTERING OR IDENTIFYING INSIGNIAS TO VEHICLE BODIES	85
G214 WELD EXHAUST SYSTEM COMPONENTS	85
G200 OXACETYLENE-WELD SHEET METAL	85
I315 SERVICE BATTERIES	85
I268 INSPECT LIGHTING SYSTEMS	85
H244 SERVICE AIR CLEANERS	85
H246 SERVICE ENGINE OIL SYSTEMS	85
0545 REMOVE OR INSTALL BRAKE SHOES	85
V751 INSTALL NONCURVED GLASS	85
L428 SERVICE COOLING SYSTEMS	85
L430 TEST STRENGTH OF ANTIFREEZE SOLUTIONS	85
C110 ROAD-TEST VEHICLES	85
I288 REMOVE OR INSTALL BATTERIES	85
K350 ADJUST CARBURETOR FUEL MIXTURES	85
G191 HEAT STRAIGHTEN BENT OR TWISTED METAL PARTS	85
N499 REMOVE OR INSTALL FRONT WHEEL BEARINGS	85
L423 REMOVE OR INSTALL HEATING OR COOLING SYSTEM HOSES	85

TABLE A13

**REPRESENTATIVE TASKS PERFORMED BY
ENGINE AND MINOR REPAIR MECHANICS
(GRP210)**

TASKS	PERCENT MEMBERS PERFORMING (N=39)
H246 SERVICE ENGINE OIL SYSTEMS	92
I257 ADJUST IGNITION POINTS USING FEELER GAUGES	92
I265 INSPECT BATTERIES	92
H244 SERVICE AIR CLEANERS	90
I264 CHARGE BATTERIES	90
H220 INSPECT MOTOR MOUNTS	90
H249 TEST CYLINDER COMPRESSION IN GASOLINE ENGINES	90
H228 REMOVE OR INSTALL ENGINES	90
H215 ADJUST ENGINE DRIVE BELTS	87
I288 REMOVE OR INSTALL BATTERIES	87
H216 ADJUST VALVE CLEARANCES	87
I266 INSPECT CHARGING SYSTEMS	85
I287 REMOVE OR INSTALL ALTERNATORS	85
H234 REMOVE OR INSTALL OIL PANS	85
I282 PERFORM BATTERY HYDROMETER TESTS	82
I299 REMOVE OR INSTALL IGNITION POINTS	82
H231 REMOVE OR INSTALL FLYWHEELS	82
I298 REMOVE OR INSTALL IGNITION COILS	82
G193 LUBRICATE VEHICLES	79
H232 REMOVE OR INSTALL HEAD ASSEMBLIES	79
H233 REMOVE OR INSTALL MOTOR MOUNTS	79
I267 INSPECT IGNITION SYSTEMS	77
H227 REMOVE OR INSTALL ENGINE DRIVE BELTS	77
H245 SERVICE ENGINE DRIVE BELTS	77
I269 INSPECT STARTING SYSTEMS	74
H219 INSPECT ENGINE PARTS	74
I273 ISOLATE CHARGING SYSTEM MALFUNCTIONS	74
I268 INSPECT LIGHTING SYSTEMS	74
I308 REMOVE OR INSTALL SPARK PLUGS	74
I309 REMOVE OR INSTALL PRESSURE SENDING UNITS	74
I256 ADJUST IGNITION POINTS USING DWELL METERS	72
I279 ISOLATE STARTER SYSTEM MALFUNCTIONS	72
I317 SET IGNITION TIMING	72
H221 ISOLATE LUBRICATION SYSTEM MALFUNCTIONS	72
H230 REMOVE OR INSTALL FLYWHEEL RING GEARS	69
G210 REMOVE OR INSTALL V-BELT PULLEYS	69
I290 REMOVE OR INSTALL DISTRIBUTORS	69
H237 REMOVE OR INSTALL TIMING CHAINS, BELTS, GEARS, OR SPROCKETS	69
H235 REMOVE OR INSTALL OIL PUMPS	69

TABLE A14

**REPRESENTATIVE TASKS PERFORMED BY
MINOR REPAIR AND ADMINISTRATIVE PERSONNEL
(GRP106)**

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=16)</u>
H215 ADJUST ENGINE DRIVE BELTS	88
C110 ROAD-TEST VEHICLES	81
I288 REMOVE OR INSTALL BATTERIES	81
I268 INSPECT LIGHTING SYSTEMS	81
E150 POST ENTRIES TO OPERATOR'S INSPECTION GUIDE AND TROUBLE REPORT FORMS	75
E155 POST ENTRIES TO VEHICLE AND EQUIPMENT WORK ORDER FORMS (AF FORM 1823)	75
E149 POST ENTRIES TO MINOR MAINTENANCE WORK ORDER FORMS (AF FORM 1827)	75
H227 REMOVE OR INSTALL ENGINE DRIVE BELTS	75
F175 RESEARCH FEDERAL STOCK NUMBERS OR PART NUMBERS	75
I266 INSPECT CHARGING SYSTEMS	75
H244 SERVICE AIR CLEANERS	75
I287 REMOVE OR INSTALL ALTERNATORS	75
I257 ADJUST IGNITION POINTS USING FEELER GAUGES	75
0522 ADJUST PARKING BRAKES	75
I308 REMOVE OR INSTALL SPARK PLUGS	75
C99 INSPECT TOOLS	69
B48 ORIENT NEWLY ASSIGNED PERSONNEL	69
I265 INSPECT BATTERIES	69
I267 INSPECT IGNITION SYSTEMS	69
I269 INSPECT STARTING SYSTEMS	69
I299 REMOVE OR INSTALL IGNITION POINTS	69
C103 PERFORM SELF-INSPECTIONS	63
I282 PERFORM BATTERY HYDROMETER TESTS	63
L430 TEST STRENGTH OF ANTIFREEZE SOLUTIONS	63
P562 INSPECT TIRES FOR SERVICEABILITY	63
H245 SERVICE ENGINE DRIVE BELTS	63
I297 REMOVE OR INSTALL GENERATORS OR STARTER MOTORS	63
L428 SERVICE COOLING SYSTEMS	63
I298 REMOVE OR INSTALL IGNITION COILS	63

TABLE A15

**REPRESENTATIVE TASKS PERFORMED BY
REFUELING VEHICLE EQUIPMENT MECHANICS
(GRP141)**

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=38)</u>
S672 PERFORM REFUELING HOSE HYDROSTATIC TESTS	97
S688 REMOVE OR INSTALL REFUELING EQUIPMENT VITONIC COUPLINGS	97
S689 REMOVE OR INSTALL REFUELING HOSES	95
S662 CALIBRATE REFUELING METERS	95
S682 REMOVE OR INSTALL REFUELING EQUIPMENT FILTERS	95
S661 ADJUST REFUELING EQUIPMENT HOSE REEL COMPONENTS	95
S667 INSPECT REFUELING EQUIPMENT TANK MOUNTINGS	92
S693 REMOVE OR INSTALL STATIC DISCHARGE REELS	89
S665 DISASSEMBLE OR ASSEMBLE REFUELING EQUIPMENT HOSE REEL COMPONENTS	89
S686 REMOVE OR INSTALL REFUELING EQUIPMENT LINE STRAINERS	84
I288 REMOVE OR INSTALL BATTERIES	84
S675 PERFORM STATIC GROUND REEL CONTINUITY TESTS	82
S690 REMOVE OR INSTALL REFUELING METER COMPONENTS	82
S685 REMOVE OR INSTALL REFUELING EQUIPMENT HOSE REELS	82
S668 INSPECT REFUELING NOZZLES OR HYDRANT COUPLERS (MOOSHHEADS)	79
S687 REMOVE OR INSTALL REFUELING EQUIPMENT TANK PADS	79
S664 DISASSEMBLE OR ASSEMBLE REFUELING EQUIPMENT DISPENSING SYSTEM VALVES	74
S691 REMOVE OR INSTALL REFUELING PUMP ASSEMBLIES	74
S666 DISASSEMBLE OR ASSEMBLE REFUELING PUMP ASSEMBLIES	74
H215 ADJUST ENGINE DRIVE BELTS	74
I308 REMOVE OR INSTALL SPARK PLUGS	71
S684 REMOVE OR INSTALL REFUELING EQUIPMENT HOSE REEL DRIVE COMPONENTS	71
K355 ADJUST THROTTLE LINKAGES	71
S659 ADJUST REFUELING EQUIPMENT DISPENSING SYSTEM VALVES	68
S671 ISOLATE REFUELING METER MALFUNCTIONS	68
S679 REMOVE OR INSTALL MANHOLE COVERS	68
S678 REMOVE OR INSTALL HYDRANT COUPLERS (MOOSHHEADS)	66
S681 REMOVE OR INSTALL REFUELING EQUIPMENT DISPENSING SYSTEM VALVES	66
C99 INSPECT TOOLS	63
H244 SERVICE AIR CLEANERS	63
S660 ADJUST REFUELING EQUIPMENT FLOAT CONTROL VALVES	63
N484 PACK WHEEL BEARINGS	63
K395 SERVICE FUEL FILTERS	63
S670 ISOLATE REFUELING EQUIPMENT DISPENSING SYSTEM MALFUNCTIONS	61

TABLE A16

**REPRESENTATIVE TASKS PERFORMED BY
REFUELING VEHICLE EQUIPMENT SECTION SUPERVISORS
(GRP184)**

TASKS	PERCENT MEMBERS PERFORMING (N=19)
S667 INSPECT REFUELING EQUIPMENT TANK MOUNTINGS	100
S672 PERFORM REFUELING HOSE HYDROSTATIC TESTS	95
S688 REMOVE OR INSTALL REFUELING EQUIPMENT VITALIC COUPLINGS	95
S689 REMOVE OR INSTALL REFUELING HOSES	89
S661 ADJUST REFUELING EQUIPMENT HOSE REEL COMPONENTS	89
S662 CALIBRATE REFUELING METERS	89
S675 PERFORM STATIC GROUND REEL CONTINUITY TESTS	89
I288 REMOVE OR INSTALL BATTERIES	89
I269 INSPECT STARTING SYSTEMS	89
S682 REMOVE OR INSTALL REFUELING EQUIPMENT FILTERS	89
I266 INSPECT CHARGING SYSTEMS	89
I267 INSPECT IGNITION SYSTEMS	89
I268 INSPECT LIGHTING SYSTEMS	84
S686 REMOVE OR INSTALL REFUELING EQUIPMENT LINE STRAINERS	84
H215 ADJUST ENGINE DRIVE BELTS	84
C110 ROAD-TEST VEHICLES	84
C99 INSPECT TOOLS	79
S693 REMOVE OR INSTALL STATIC DISCHARGE REELS	79
S665 DISASSEMBLE OR ASSEMBLE REFUELING EQUIPMENT HOSE REEL COMPONENTS	79
C77 CONDUCT VEHICLE LIMITED TECHNICAL INSPECTIONS (LTI)	79
I308 REMOVE OR INSTALL SPARK PLUGS	79
685 REMOVE OR INSTALL REFUELING EQUIPMENT HOSE REELS	79
S687 REMOVE OR INSTALL REFUELING EQUIPMENT TANK PADS	79
A3 DETERMINE WORK PRIORITIES	74
E145 MAINTAIN WORK CONTROL LOGS OR WORK STATUS BOARDS	74
E153 POST ENTRIES TO REFUELING EQUIPMENT HOST INSTALLATION AND HYDROSTATIC TEST DATA RECORD FORMS (AF FORM 1830)	74
S668 INSPECT REFUELING NOZZLES OR HYDRANT COUPLERS (MOOSEHEADS)	74
C72 ANALYZE CAUSES OF VEHICLE FAILURES	74
C78 CONDUCT VEHICLE QUALITY CONTROL INSPECTIONS	74
H244 SERVICE AIR CLEANERS	74
F175 RESEARCH FEDERAL STOCK NUMBERS OR PART NUMBERS	74
K395 SERVICE FUEL FILTERS	74
I265 INSPECT BATTERIES	74
K355 ADJUST THROTTLE LINKAGES	74
S679 REMOVE OR INSTALL MANHOLE COVERS	74
B65 SUPERVISE SPECIAL VEHICLE MECHANICS - REFUELING VEHICLES (AFSC 47251B)	68

TABLE A17

REPRESENTATIVE TASKS PERFORMED BY
QUALITY ASSURANCE PERSONNEL
(GRP048)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=74)</u>
I268 INSPECT LIGHTING SYSTEMS	93
I269 INSPECT STARTING SYSTEMS	91
C110 ROAD-TEST VEHICLES	89
I266 INSPECT CHARGING SYSTEMS	89
N480 INSPECT DRIVE SHAFT COMPONENTS	86
I267 INSPECT IGNITION SYSTEMS	86
N481 INSPECT STEERING MECHANISM COMPONENTS	85
N482 INSPECT SUSPENSION SYSTEM COMPONENTS	84
I270 INSPECT WARNING SYSTEMS	84
0529 INSPECT HYDRAULIC BRAKE SYSTEM COMPONENTS	82
I265 INSPECT BATTERIES	80
C78 CONDUCT VEHICLE QUALITY CONTROL INSPECTIONS	78
P562 INSPECT TIRES FOR SERVICEABILITY	73
N479 INSPECT DRIVE AXLES	69
H229 INSPECT MOTOR MOUNTS	68
0524 INSPECT AIR BRAKE SYSTEM COMPONENTS	66
N477 INSPECT ALL-WHEEL DRIVE SYSTEMS	64
A13 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	62
H219 INSPECT ENGINE PARTS	59
C72 ANALYZE CAUSES OF VEHICLE FAILURES	58
L406 INSPECT COOLING SYSTEM COMPONENTS	58
N478 INSPECT BOGIE SYSTEM COMPONENTS	55
K364 INSPECT GASOLINE FUEL SYSTEM COMPONENTS	54
C77 CONDUCT VEHICLE LIMITED TECHNICAL INSPECTIONS (LTI)	54
C99 INSPECT TOOLS	53

TABLE A18

**REPRESENTATIVE TASKS PERFORMED BY
QUALITY CONTROL INSPECTORS
(GRP257)**

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=26)</u>
I265 INSPECT BATTERIES	100
C110 ROAD-TEST VEHICLES	92
I268 INSPECT LIGHTING SYSTEMS	92
N482 INSPECT SUSPENSION SYSTEM COMPONENTS	88
N480 INSPECT DRIVE SHAFT COMPONENTS	88
N481 INSPECT STEERING MECHANISM COMPONENTS	88
I269 INSPECT STARTING SYSTEMS	88
I267 INSPECT IGNITION SYSTEMS	88
I266 INSPECT CHARGING SYSTEMS	88
C78 CONDUCT VEHICLE QUALITY CONTROL INSPECTIONS	85
I270 INSPECT WARNING SYSTEMS	85
0529 INSPECT HYDRAULIC BRAKE SYSTEM COMPONENTS	85
P562 INSPECT TIRES FOR SERVICEABILITY	81
0527 INSPECT AIR BRAKE SYSTEM COMPONENTS	77
H220 INSPECT MOTOR MOUNTS	69
H219 INSPECT ENGINE PARTS	62
N479 INSPECT DRIVE AXLES	62
N478 INSPECT BOGIE SYSTEM COMPONENTS	62
K364 INSPECT GASOLINE FUEL SYSTEM COMPONENTS	58
N477 INSPECT ALL-WHEEL DRIVE SYSTEMS	58
L406 INSPECT COOLING SYSTEM COMPONENTS	54
K363 INSPECT DIESEL FUEL SYSTEM COMPONENTS	54
A13 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	54
E155 POST ENTRIES TO VEHICLE AND EQUIPMENT WORK ORDER FORMS (AF FORM 1823)	50
V749 INSPECT DAMAGED BODY SECTIONS	50
0528 INSPECT ELECTRICAL BRAKE SYSTEM COMPONENTS	50
T704 INSPECT FORKLIFT MAST ASSEMBLIES	50
H215 ADJUST ENGINE DRIVE BELTS	50

TABLE A19
REPRESENTATIVE TASKS PERFORMED BY
DIAGNOSTIC INSPECTORS
(GRP253)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=39)</u>
I269 INSPECT STARTING SYSTEMS	100
I266 INSPECT CHARGING SYSTEMS	100
I268 INSPECT LIGHTING SYSTEMS	100
I267 INSPECT IGNITION SYSTEMS	100
C110 ROAD-TEST VEHICLES	95
I270 INSPECT WARNING SYSTEMS	95
C78 CONDUCT VEHICLE QUALITY CONTROL INSPECTIONS	90
0529 INSPECT HYDRAULIC BRAKE SYSTEM COMPONENTS	87
N480 INSPECT DRIVE SHAFT COMPONENTS	87
N481 INSPECT STEERING MECHANISM COMPONENTS	85
I265 INSPECT BATTERIES	82
N482 INSPECT SUSPENSION SYSTEM COMPONENTS	82
I279 ISOLATE STARTER SYSTEM MALFUNCTIONS	79
C72 ANALYZE CAUSES OF VEHICLE FAILURES	77
I277 ISOLATE LIGHTING SYSTEM MALFUNCTIONS	77
N479 INSPECT DRIVE AXLES	77
P562 INSPECT TIRES FOR SERVICEABILITY	74
H220 INSPECT MOTOR MOUNTS	74
I273 ISOLATE CHARGING SYSTEM MALFUNCTIONS	74
L406 INSPECT COOLING SYSTEM COMPONENTS	72
C99 INSPECT TOOLS	72
N477 INSPECT ALL-WHEEL DRIVE SYSTEMS	72
0532 ISOLATE AIR BRAKE SYSTEM MALFUNCTIONS	72
H219 INSPECT ENGINE PARTS	69
A13 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	69
B48 ORIENT NEWLY ASSIGNED PERSONNEL	69
I280 ISOLATE WARNING SYSTEM MALFUNCTIONS	67
0534 ISOLATE HYDRAULIC BRAKE SYSTEM MALFUNCTIONS	67
0527 INSPECT AIR BRAKE SYSTEM COMPONENTS	67
I276 ISOLATE IGNITION SYSTEM MALFUNCTIONS OTHER THAN ELECTRONIC IGNITION SYSTEMS	67
C77 CONDUCT VEHICLE LIMITED TECHNICAL INSPECTIONS (LTI)	67
I283 PERFORM BATTERY LOAD TESTS	64
I272 ISOLATE ALTERNATOR MALFUNCTIONS	64
N483 ISOLATE STEERING SYSTEM MALFUNCTIONS	62
L409 ISOLATE COOLING SYSTEM MALFUNCTIONS	62
C103 PERFORM SELF-INSPECTIONS	62
K364 INSPECT GASOLINE FUEL SYSTEM COMPONENTS	59

TABLE A20
REPRESENTATIVE TASKS PERFORMED BY
TIRE SHOP PERSONNEL
(GRP027)

<u>TASKS</u>	PERCENT MEMBERS PERFORMING (N=71)
P562 INSPECT TIRES FOR SERVICEABILITY	100
P559 DISMOUNT OR MOUNT LIGHT DUTY TIRES	99
P558 DISMOUNT OR MOUNT HEAVY DUTY TIRES	99
P565 LEAK TEST TIRES OR TUBES	94
P557 COLD PATCH TUBES	94
P570 REMOVE OR INSTALL VALVE STEMS	93
P568 PLUG TIRES	89
P566 PERFORM TIRE BUBBLE BALANCING	79
P561 HOT PATCH TUBES	59
P564 INSTALL SELF-VULCANIZING BOOTS OR PATCHES	52

TABLE A21
REPRESENTATIVE TASKS PERFORMED BY
VEHICLE BODY REPAIR PERSONNEL
(GRP057)

TASKS	PERCENT MEMBERS PERFORMING (N=216)
V741 APPLY BODY FILLERS	96
V740 ADJUST HINGES OR LOCKING MECHANISMS	96
V742 APPLY LETTERING OR IDENTIFYING INSIGNIAS TO VEHICLE BODIES	95
V755 PREPARE VEHICLE BODY SURFACES FOR PAINTING	94
V753 PAINT VEHICLE BODY SURFACES	94
V743 APPLY PRIMERS	94
V754 PREPARE PAINT FOR PAINTING	93
V761 REMOVE OR INSTALL LOCKS OR LATCHES	93
V745 APPLY WEATHER STRIPPING TO BODY PARTS	93
V762 REMOVE OR INSTALL METAL BODY PARTS SUCH AS DOORS, FENDERS, OR FLOORS	93
V772 STRAIGHTEN DISTORTED PANELS, DOORS, OR FENDERS	91
V748 CUT SAFETY GLASS	91
V767 REMOVE OR INSTALL WINDOW REGULATORS	91
V760 REMOVE OR INSTALL HINGES	90
V766 REMOVE OR INSTALL WINDOW CHANNELS	90
G197 OPERATE CUTTING TORCHES	90
V751 INSTALL NONCURVED GLASS	90
V759 REMOVE OR INSTALL BUMPERS	90
V750 INSTALL CURVED GLASS	88
V749 INSPECT DAMAGED BODY SECTIONS	88
V771 SHRINK OR STRETCH DAMAGED METAL AREAS	87
G186 BRAZE SHEET METAL	85
G200 OXACETYLENE-WELD SHEET METAL	85
G183 ARC-WELD MILD STEEL	85
V765 REMOVE OR INSTALL VEHICLE MOLDINGS	84
G191 HEAT STRAIGHTEN BENT OR TWISTED METAL PARTS	82
V763 REMOVE OR INSTALL UPHOLSTERY	82
G214 WELD EXHAUST SYSTEM COMPONENTS	81
V769 REPAIR RADIATOR OR HEATER CORE LEAKS	79
V752 MEND UPHOLSTERY	75
V756 PRESSURE TEST RADIATORS	75
G203 PERFORM SOFT SOLDERING	74
G196 MECHANICALLY STRAIGHTEN BENT OR TWISTED METAL PARTS	71
V758 REBUILD SEAT FRAMES	69
V746 CONSTRUCT SEAT COVERS	66
G202 PERFORM SILVER SOLDERING	64
G181 ARC-WELD CAST IRON	62

TABLE A22
REPRESENTATIVE TASKS PERFORMED BY
VEHICLE BODY REPAIR SECTION SUPERVISORS
(GRP797)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=48)</u>
V749 INSPECT DAMAGED BODY SECTIONS	100
V753 PAINT VEHICLE BODY SURFACES	100
V755 PREPARE VEHICLE BODY SURFACES FOR PAINTING	100
V742 APPLY LETTERING OR IDENTIFYING INSIGNIAS TO VEHICLE BODIES	100
V754 PREPARE PAINT FOR PAINTING	100
G197 OPERATE CUTTING TORCHES	100
V751 INSTALL NONCURVED GLASS	100
V772 STRAIGHTEN DISTORTED PANELS, DOORS, OR FENDERS	100
V743 APPLY PRIMERS	100
V762 REMOVE OR INSTALL METAL BODY PARTS SUCH AS DOORS, FENDERS, OR FLOORS	100
V760 REMOVE OR INSTALL HINGES	100
V745 APPLY WEATHER STRIPPING TO BODY PARTS	100
V766 REMOVE OR INSTALL WINDOW CHANNELS	100
V759 REMOVE OR INSTALL BUMPERS	100
V765 REMOVE OR INSTALL VEHICLE MOLDINGS	100
V741 APPLY BODY FILLERS	98
V748 CUT SAFETY GLASS	98
V767 REMOVE OR INSTALL WINDOW REGULATIONS	98
G183 ARC-WELD MILD STEEL	98
V771 SHRINK OR STRETCH DAMAGED METAL AREAS	98
G186 BRAZE SHEET METAL	98
V740 ADJUST HINGES OR LOCKING MECHANISMS	96
V761 REMOVE OR INSTALL LOCKS OR LATCHES	96
V750 INSTALL CURVED GLASS	96
G214 WELD EXHAUST SYSTEM COMPONENTS	94
G196 MECHANICALLY STRAIGHTEN BENT OR TWISTED METAL PARTS	94
C99 INSPECT TOOLS	94
V752 MEND UPHOLSTERY	94
V763 REMOVE OR INSTALL UPHOLSTERY	92
G191 HEAT STRAIGHTEN BENT OR TWISTED METAL PARTS	92
V769 REPAIR RADIATOR OR HEATER CORE LEAKS	92
G181 ARC-WELD CAST IRON	92
B48 ORIENT NEWLY ASSIGNED PERSONNEL	90
V758 REBUILD SEAT FRAMES	90
A25 PREPARE WORK ASSIGNMENTS	88
G200 OXACETYLENE-WELD SHEET METAL	88
V756 PRESSURE TEST RADIATORS	88

TABLE A23
REPRESENTATIVE TASKS PERFORMED BY
VEHICLE BODY REPAIR WORKERS
(GMP767)

TASKS	PERCENT NUMBER PERFORMING (N=142)
V741 APPLY BODY FILLERS	100
V740 ADJUST HINGES OR LOCKING MECHANISMS	100
V772 STRAIGHTEN DISTORTED PANELS, DOORS, OR BODIES	100
V761 REMOVE OR INSTALL LOCKS OR LATCHES	99
V742 APPLY LETTERING OR IDENTIFYING INSIGNIAS TO VEHICLE BODIES	99
V755 PREPARE VEHICLE BODY SURFACES FOR PAINTING	98
V753 PAINT VEHICLE BODY SURFACES	98
V749 APPLY PRIMERS	98
V767 REMOVE OR INSTALL WINDOW REGULATORS	98
V762 REMOVE OR INSTALL METAL BODY PARTS SUCH AS DOORS, FENDERS, OR FLOORS	98
V745 APPLY WEATHER STRIPPING TO BODY PARTS	97
V751 INSTALL NONCURVED GLASS	96
V766 REMOVE OR INSTALL WINDOW CHANNELS	96
V754 PREPARE PAINT FOR PAINTING	96
V760 REMOVE OR INSTALL HINGES	96
V758 INSTALL CURVED GLASS	96
V748 CUT SAFETY GLASS	95
V759 REMOVE OR INSTALL BUMPERS	95
V771 SHRINK OR STRETCH DAMAGED METAL AREAS	93
G197 OPERATE CUTTING TORCHES	92
V765 REMOVE OR INSTALL VEHICLE MOLDINGS	89
G200 OXACETYLENE-WELD SHEET METAL	89
V749 INSPECT DAMAGED BODY SECTIONS	89
V763 REMOVE OR INSTALL UPHOLSTERY	89
G214 WELD EXHAUST SYSTEM COMPONENTS	86
G186 BRAZE SHEET METAL	86
G188 ARC-WELD MILD STEEL	85
G191 HEAT STRAIGHTEN BENT OR TWISTED METAL PARTS	83
V769 REPAIR RADIATOR OR HEATER CORE LEAKS	82
V752 MEND UPHOLSTERY	79
V756 PRESSURE TEST RADIATORS	77
G203 PERFORM SOFT SOLDERING	75
V758 REBUILD SEAT FRAMES	72
G196 MECHANICALLY STRAIGHTEN BENT OR TWISTED METAL PARTS	70
V746 CONSTRUCT SEAT COVERS	65
G202 PERFORM SILVER SOLDERING	63
G182 ARC-WELD GALVANIZED METAL	61

TABLE A24
**REPRESENTATIVE TASKS PERFORMED BY
 MANAGERIAL AND SUPERVISORY PERSONNEL
 (GRP036)**

TASKS	PERCENT MEMBERS PERFORMING (N=381)
A13 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	92
B48 ORIENT NEWLY ASSIGNED PERSONNEL	90
B33 COUNSEL PERSONNEL ON PERSONAL OR MILITARY MATTERS	86
C105 PREPARE APR's	86
A3 DETERMINE WORK PRIORITIES	81
B47 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	80
C103 PERFORM SELF-INSPECTIONS	79
C99 INSPECT TOOLS	77
A25 PREPARE WORK ASSIGNMENTS	75
A2 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	73
A26 SCHEDULE TEMPORARY DUTY, LEAVES, OR PASSES	73
B32 COORDINATE ON VEHICLE MAINTENANCE PROBLEMS WITH OTHER UNITS OR AGENCIES	71
A12 ESTABLISH WORK SCHEDULES	70
B71 WRITE CORRESPONDENCE	68
C85 EVALUATE INDIVIDUALS FOR RECOGNITION	66
C79 ENDORSE AIRMAN PERFORMANCE REPORTS (APR)	66
A9 DEVELOP WORK METHODS OR PROCEDURES	64
C72 ANALYZE CAUSES OF VEHICLE FAILURES	63
C110 ROAD-TEST VEHICLES	62
C108 PREPARE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	62
C74 CERTIFY MAINTENANCE DOCUMENTATION FORMS	59
B45 IMPLEMENT SELF-INSPECTION PROGRAMS	59
A8 DEVELOP SELF-INSPECTION PROGRAMS	59
B29 CONDUCT BRIEFINGS	58
B58 SUPERVISE CIVILIAN PERSONNEL	57
C78 CONDUCT VEHICLE QUALITY CONTROL INSPECTIONS	57
C73 ANALYZE WORKLOAD REQUIREMENTS	57
B28 ASSIGN PERSONNEL TO DUTY POSITIONS	57
B35 DIRECT MAINTENANCE OF FACILITIES OR WORK AREAS	56
B43 IMPLEMENT SAFETY PROGRAMS	56
B42 IMPLEMENT QUALITY CONTROL STANDARDS	55
A11 ESTABLISH PERFORMANCE STANDARDS	55
C106 PREPARE CIVILIAN PERFORMANCE RATINGS OR SUPERVISORY APPRAISALS	54

TABLE A25
REPRESENTATIVE TASKS PERFORMED BY
VEHICLE MAINTENANCE SUPERINTENDENTS
(GRP1090)

TASKS	PERCENT MEMBERS PERFORMING (N=82)
A13 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100
A2 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	100
B32 COORDINATE ON VEHICLE MAINTENANCE PROBLEMS WITH OTHER UNITS OR AGENCIES	98
A10 ESTABLISH ORGANIZATIONAL POLICIES, OPERATING INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	98
B47 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	96
C105 PREPARE APR's	96
B33 COUNSEL PERSONNEL ON PERSONAL OR MILITARY MATTERS	96
A8 DEVELOP SELF-INSPECTION PROGRAMS	96
C85 EVALUATE INDIVIDUALS FOR RECOGNITION	96
B71 WRITE CORRESPONDENCE	95
C79 ENDORSE AIRMAN PERFORMANCE REPORTS (APR)	95
C103 PERFORM SELF-INSPECTIONS	95
B48 ORIENT NEWLY ASSIGNED PERSONNEL	95
C89 EVALUATE MAINTENANCE OR USE OF WORKSPACE, EQUIPMENT, OR SUPPLIES	95
A26 SCHEDULE TEMPORARY DUTY, LEAVES, OR PASSES	95
B45 IMPLEMENT SELF-INSPECTION PROGRAMS	94
C108 PREPARE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	94
B28 ASSIGN PERSONNEL TO DUTY POSITIONS	94
A3 DETERMINE WORK PRIORITIES	93
C94 EVALUATE SELF-INSPECTION PROGRAMS	90
C82 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	90
C90 EVALUATE NECESSITY FOR CONTRACT MAINTENANCE	90
A9 DEVELOP WORK METHODS OR PROCEDURES	90
B42 IMPLEMENT QUALITY CONTROL STANDARDS	89
C86 EVALUATE INSPECTION REPORTS OR PROCEDURES	89
A11 ESTABLISH PERFORMANCE STANDARDS	89
C84 EVALUATE INDIVIDUALS FOR PROMOTIONS, DEMOTION, OR RECLASSIFICATION	89
A12 ESTABLISH WORK SCHEDULES	88
B29 CONDUCT BRIEFINGS	87
B40 IMPLEMENT CHANGES IN MAINTENANCE PROCEDURES	87
A14 PLAN EQUIPMENT OR FACILITY MAINTENANCE REQUIREMENTS	87
A22 PREPARE JOB DESCRIPTIONS	85

TABLE A26

**REPRESENTATIVE TASKS PERFORMED BY
SUPPORT SECTION NCOICs
(GRP1121)**

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=25)</u>
A3 DETERMINE WORK PRIORITIES	100
C78 CONDUCT VEHICLE QUALITY CONTROL INSPECTIONS	100
C105 PREPARE APR's	100
C72 ANALYZE CAUSES OF VEHICLE FAILURES	100
A25 PREPARE WORK ASSIGNMENTS	100
A13 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100
C89 EVALUATE MAINTENANCE OR USE OF WORKSPACE, EQUIPMENT, OR SUPPLIES	100
C99 INSPECT TOOLS	100
B48 ORIENT NEWLY ASSIGNED PERSONNEL	100
B42 IMPLEMENT QUALITY CONTROL STANDARDS	100
B32 COORDINATE ON VEHICLE MAINTENANCE PROBLEMS WITH OTHER UNITS OR AGENCIES	96
B47 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	96
C73 ANALYZE WORKLOAD REQUIREMENTS	96
A4 DEVELOP EQUIPMENT UTILIZATION OR MAINTENANCE SCHEDULES	96
A12 ESTABLISH WORK SCHEDULES	96
A26 SCHEDULE TEMPORARY DUTY, LEAVES, OR PASSES	96
B35 DIRECT MAINTENANCE OF FACILITIES OR WORK AREAS	96
B37 DIRECT MAINTENANCE OR UTILIZATION OF EQUIPMENT	96
A9 DEVELOP WORK METHODS OR PROCEDURES	96
C85 EVALUATE INDIVIDUALS FOR RECOGNITION	96
F175 RESEARCH FEDERAL STOCK NUMBERS OR PART NUMBERS	96
B40 IMPLEMENT CHANGES IN MAINTENANCE PROCEDURES	96
A11 ESTABLISH PERFORMANCE STANDARDS	96
A2 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	96
C103 PERFORM SELF-INSPECTIONS	96
B45 IMPLEMENT SELF-INSPECTION PROGRAMS	96
C109 REVIEW MAINTENANCE DATA OR EQUIPMENT RECORD FORMS	96
E148 POST ENTRIES TO LIMITED TECHNICAL INSPECTION - MOTOR VEHICLES FORMS (AFTO FORM 91)	96
C101 INSPECT VEHICLES FOR STORAGE OR PRESERVATION	96
C108 PREPARE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	96
C110 ROAD-TEST VEHICLES	96
B71 WRITE CORRESPONDENCE	92
C74 CERTIFY MAINTENANCE DOCUMENTATION FORMS	92

TABLE A27
REPRESENTATIVE TASKS PERFORMED BY
MAINTENANCE CONTROL NSOPCs
(GRP480)

TASKS	PERCENT MEMBERS PERFORMING (N=20)
A3 DETERMINE WORK PRIORITIES	100
B32 COORDINATE ON VEHICLE MAINTENANCE PROBLEMS WITH OWNER UNITS OR AGENCIES	90
C73 ANALYZE WORKLOAD REQUIREMENTS	90
C105 PREPARE APR's	90
E142 INITIATE VEHICLE ACCIDENT OR ABUSE LETTERS	90
A13 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	90
B33 COUNSEL PERSONNEL ON PERSONAL OR MILITARY MATTERS	90
A5 DEVELOP INSPECTION SCHEDULES	85
E163 REVIEW VEHICLE HISTORICAL RECORD DATA FOR MAINTENANCE, SCHEDULED MAINTENANCE, OR REPETITIVE MAINTENANCE	85
A4 DEVELOP EQUIPMENT UTILIZATION OR MAINTENANCE SCHEDULES	85
C103 PERFORM SELF-INSPECTIONS	85
B47 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	85
E139 ANALYZE VEHICLE INTEGRATED MANAGEMENT SYSTEM (VIMS) REPORTS	80
C74 CERTIFY MAINTENANCE DOCUMENTATION FORMS	80
B48 ORIENT NEWLY ASSIGNED PERSONNEL	80
E155 POST ENTRIES TO VEHICLE AND EQUIPMENT WORK ORDER FORMS (AF FORM 1823)	75
C109 REVIEW MAINTENANCE DATA OR EQUIPMENT RECORD FORMS	75
E156 POST ENTRIES TO VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828)	75
E145 MAINTAIN WORK CONTROL LOGS OR WORK STATUS BOARDS	75
E167 PREPARE VEHICLE STATUS REPORTS	75
A12 ESTABLISH WORK SCHEDULES	75
E164 SCHEDULE VEHICLE INSPECTIONS	75
E160 PREPARE VEHICLE REPAIR ESTIMATES	75
A9 DEVELOP WORK METHODS OR PROCEDURES	75
E148 POST ENTRIES ON LIMITED TECHNICAL INSPECTION - MOTOR VEHICLES FORMS (AF FORM 91)	75
B71 WRITE CORRESPONDENCE	70
F170 MAINTAIN DEFERRED OR DELAYED PARTS BOARDS OR RECORDS	70
E146 POST ENTRIES TO INDIRECT MANHOURS LABOR TIME CARD FORMS (AF FORM 1831)	70
A25 PREPARE WORK ASSIGNMENTS	70

TABLE A28
REPRESENTATIVE TASKS PERFORMED BY
MAINTENANCE SHOP NCOICs
(GRP260)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=55)</u>
C105 PREPARE APR's	98
B48 ORIENT NEWLY ASSIGNED PERSONNEL	98
B33 COUNSEL PERSONNEL ON PERSONAL OR MILITARY MATTERS	92
C99 INSPECT TOOLS	90
C110 ROAD-TEST VEHICLES	85
A13 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFFERENCES, OR WORKSHOPS	85
A3 DETERMINE WORK PRIORITIES	83
C103 PERFORM SELF-INSPECTIONS	81
B58 SUPERVISE CIVILIAN PERSONNEL	78
D118 COUNSEL TRAINEES ON TRAINING PROGRESS	78
B47 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	74
A25 PREPARE WORK ASSIGNMENTS	72
C106 PREPARE CIVILIAN PERFORMANCE RATINGS OR SUPERVISORY APPRaisALS	70
C77 CONDUCT VEHICLE LIMITED TECHNICAL INSPECTIONS (LTI)	69
C72 ANALYZE CAUSES OF VEHICLE FAILURES	65
A12 ESTABLISH WORK SCHEDULES	65
D131 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	65
C79 ENDORSE AIRMAN PERFORMANCE REPORTS (APR)	63
D113 ASSIGN ON-THE-JOB TRAINING (OJT) TRAINERS	63
A26 SCHEDULE TEMPORARY DUTY, LEAVES, OR PASSES	61
C78 CONDUCT VEHICLE QUALITY CONTROL INSPECTIONS	60
D114 CONDUCT OJT	58
C85 EVALUATE INDIVIDUALS FOR RECOGNITION	58
B51 SUPERVISE APPRENTICE GENERAL PURPOSE VEHICLE MAINTENANCE MECHANICS (AFSC 47232)	56
C108 PREPARE RECOMMENDATIONS FOR AWARDS OR DECORATIONS	56
C74 CERTIFY MAINTENANCE DOCUMENTATION FORMS	54
D119 DETERMINE OJT TRAINING REQUIREMENTS	54
D126 EVALUATE OJT TRAINERS OR TRAINEES	54
B49 PREPARE MEDICAL OR ACCIDENT REPORTS	50

TABLE A29
REPRESENTATIVE TASKS PERFORMED BY
FIRST LINE SUPERVISORS
(GRP176)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=53)</u>
A13 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	98
C105 PREPARE APR's	94
B48 ORIENT NEWLY ASSIGNED PERSONNEL	94
A25 PREPARE WORK ASSIGNMENTS	92
A3 DETERMINE WORK PRIORITIES	92
C110 ROAD-TEST VEHICLES	92
C72 ANALYZE CAUSES OF VEHICLE FAILURES	91
B33 COUNSEL PERSONNEL ON PERSONAL OR MILITARY MATTERS	91
C99 INSPECT TOOLS	91
I266 INSPECT CHARGING SYSTEMS	91
I268 INSPECT LIGHTING SYSTEMS	89
I269 INSPECT STARTING SYSTEMS	89
C77 CONDUCT VEHICLE LIMITED TECHNICAL INSPECTIONS (LTI)	89
I267 INSPECT IGNITION SYSTEMS	87
I270 INSPECT WARNING SYSTEMS	87
C78 CONDUCT VEHICLE QUALITY CONTROL INSPECTIONS	83
D119 COUNSEL TRAINEES ON TRAINING PROGRESS	83
F175 RESEARCH FEDERAL STOCK NUMBERS OR PART NUMBERS	81
B47 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	81
C103 PERFORM SELF-INSPECTIONS	81
G213 RESEARCH TECHNICAL PUBLICATIONS	77
A12 ESTABLISH WORK SCHEDULES	77
O527 INSPECT AIR BRAKE SYSTEM COMPONENTS	77
C74 CERTIFY MAINTENANCE DOCUMENTATION FORMS	75
O529 INSPECT HYDRAULIC BRAKE SYSTEM COMPONENTS	75
N480 INSPECT DRIVE SHAFT COMPONENTS	75
D119 DETERMINE OJT TRAINING REQUIREMENTS	75
I265 INSPECT BATTERIES	75
B32 COORDINATE ON VEHICLE MAINTENANCE PROBLEMS WITH OTHER UNITS OR AGENCIES	74
I273 ISOLATE CHARGING SYSTEM MALFUNCTIONS	74
C79 ANALYZE WORKLOAD REQUIREMENTS	72
N481 INSPECT STEERING MECHANISM COMPONENTS	72
N482 INSPECT SUSPENSION SYSTEM COMPONENTS	72
C85 EVALUATE INDIVIDUALS FOR RECOGNITION	72
E146 POST ENTRIES TO INDIRECT MANHOURS LABOR TIME CARD FORMS (AF FORM 1831)	70

TABLE A30
REPRESENTATIVE TASKS PERFORMED BY
VEHICLE MAINTENANCE INSPECTORS
(GRP538)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=14)</u>
C86 EVALUATE INSPECTION REPORTS OR PROCEDURES	100
C80 EVALUATE ADMINISTRATIVE FORMS, FILES, OR PROCEDURES	100
C109 REVIEW MAINTENANCE DATA OR EQUIPMENT RECORD FORMS	93
A13 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	93
C100 INSPECT VEHICLE MAINTENANCE FOR COMPLIANCE WITH WARRANTY POLICIES	93
C107 PREPARE INSPECTION REPORTS	86
B71 WRITE CORRESPONDENCE	86
C82 EVALUATE COMPLIANCE WITH PERFORMANCE STANDARDS	86
B32 COORDINATE ON VEHICLE MAINTENANCE PROBLEMS WITH OTHER UNITS OR AGENCIES	86
C88 EVALUATE MAINTENANCE OF PUBLICATION LIBRARIES	86
A1 COLLECT INFORMATION FOR STAFF STUDIES	86
A21 PREPARE BRIEFINGS	86
C94 EVALUATE SELF-INSPECTION PROGRAMS	79
C92 EVALUATE SAFETY PROGRAMS	79
C99 INSPECT TOOLS	71
E139 ANALYZE VEHICLE INTEGRATED MANAGEMENT SYSTEM (VIMS) REPORTS	64
C75 CONDUCT STAFF ASSISTANCE VISITS	64
C91 EVALUATE PROCEDURES FOR STORAGE, INVENTORY, OR INSPECTION OF PROPERTY ITEMS	64
F167 INSPECT SECTIONS FOR UNAUTHORIZED PARTS OR SUPPLIES	64
B29 CONDUCT BRIEFINGS	64
C101 INSPECT VEHICLES FOR STORAGE OR PRESERVATION	57
C83 EVALUATE EMERGENCY PROCEDURES	57
A8 DEVELOP SELF-INSPECTION PROGRAMS	57
C103 PERFORM SELF-INSPECTIONS	50
A10 ESTABLISH ORGANIZATIONAL POLICIES, OPERATING INSTRUCTIONS (OI), OR STANDARD OPERATING PROCEDURES (SOP)	50

TABLE A31

**REPRESENTATIVE TASKS PERFORMED BY
VEHICLE MAINTENANCE MANAGERS
(GRP161)**

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=15)</u>
A13 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	100
B47 INTERPRET POLICIES, DIRECTIVES, OR PROCEDURES FOR SUBORDINATES	93
A1 COLLECT INFORMATION FOR STAFF STUDIES	93
A21 PREPARE BRIEFINGS	93
B71 WRITE CORRESPONDENCE	80
B38 COORDINATE ON VEHICLE MAINTENANCE PROBLEMS WITH OTHER UNITS OR AGENCIES	80
B39 DRAFT HIGHER HEADQUARTERS DIRECTIVES	73
A8 DEVELOP SELF-INSPECTION PROGRAMS	67
A2 DETERMINE REQUIREMENTS FOR SPACE, PERSONNEL, EQUIPMENT, OR SUPPLIES	60
C75 CONDUCT STAFF ASSISTANCE VISITS	53
C95 EVALUATE SUGGESTIONS	53
A20 PREPARE AGENDA FOR SYMPOSIUMS, CONFERENCES, OR WORKSHOPS	53
A19 PREPARE AGENDA FOR STAFF MEETINGS	53

TABLE A32
REPRESENTATIVE TASKS PERFORMED BY
MAINTENANCE CONTROLLERS
(GRP082)

TASKS	PERCENT MEMBERS PERFORMING (N=41)
E145 MAINTAIN WORK CONTROL LOGS OR WORK STATUS BOARDS	95
E156 POST ENTRIES TO VEHICLE HISTORICAL RECORD FORMS (AF FORM 1828)	90
E163 REVIEW VEHICLE HISTORICAL RECORD DATA FOR WARRANTY, SCHEDULED MAINTENANCE, OR REPETITIVE MAINTENANCE	85
E164 SCHEDULE VEHICLE INSPECTIONS	83
E155 POST ENTRIES TO VEHICLE AND EQUIPMENT WORK ORDER FORMS (AF FORM 1823)	80
A3 DETERMINE WORK PRIORITIES	73
E160 PREPARE VEHICLE REPAIR ESTIMATES	71
E161 PREPARE VEHICLE STATUS REPORTS	68
F170 MAINTAIN DEFERRED OR DELAYED PARTS BOARDS OR RECORDS	66
E140 DISPATCH MOBILE MAINTENANCE VEHICLES	66
E162 PROCESS RECORDS ON VEHICLES BEING RECEIVED, SHIPPED, OR TRANSFERRED	51

TABLE A33
REPRESENTATIVE TASKS PERFORMED BY
TRAINING PERSONNEL
(GRP019)

<u>TASKS</u>	<u>PERCENT MEMBERS PERFORMING (N=83)</u>
D111 ADMINISTER TESTS	72
D133 PREPARE LESSON PLANS	72
D118 COUNSEL TRAINEES ON TRAINING PROGRESS	67
D134 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	64
D136 SCORE TESTS	61
D138 WRITE TEST QUESTIONS	61
A13 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	59
D135 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	54
D122 DEVELOP TRAINING AIDS	54
D115 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	52

TABLE A34
 REPRESENTATIVE TASKS PERFORMED BY
 UNIT TRAINING MONITORS
 (GRP276)

<u>TASKS</u>	PERCENT MEMBERS PERFORMING (N=31)
D118 COUNSEL TRAINEES ON TRAINING PROGRESS	94
D135 PROCURE TRAINING AIDS, SPACE, OR EQUIPMENT	87
D123 DIRECT OR IMPLEMENT OJT PROGRAMS	87
D131 MAINTAIN TRAINING RECORDS, CHARTS, OR GRAPHS	87
D111 ADMINISTER TESTS	84
D133 PREPARE LESSON PLANS	81
D119 DETERMINE OJT TRAINING REQUIREMENTS	81
B48 ORIENT NEWLY ASSIGNED PERSONNEL	81
D126 EVALUATE OJT TRAINERS OR TRAINEES	77
D134 PREPARE TRAINING REPORTS	74
D122 DEVELOP TRAINING AIDS	71
D137 SELECT INDIVIDUALS FOR SPECIALIZED TRAINING	71
D136 SCORE TESTS	71
A13 PARTICIPATE IN MEETINGS, SUCH AS STAFF MEETINGS, BRIEFINGS, CONFERENCES, OR WORKSHOPS	71
D124 DIRECT OR IMPLEMENT TRAINING PROGRAMS OTHER THAN OJT	68
D120 DETERMINE RESIDENT COURSE TRAINING REQUIREMENTS	65
D127 EVALUATE TRAINING MATERIALS	65
D138 WRITE TEST QUESTIONS	65
D129 EVALUATE TRAINING PROGRESS OF CLASSROOM STUDENTS	61
D115 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	58
B71 WRITE CORRESPONDENCE	58
D130 MAINTAIN STUDY REFERENCE FILES	58
D132 PLAN OJT	55
D128 EVALUATE TRAINING METHODS OR TECHNIQUES	55
D116 CONDUCT SAFETY TRAINING	52
D114 CONDUCT OJT	52

TABLE A35
**REPRESENTATIVE TASKS PERFORMED BY
 TECHNICAL TRAINING INSTRUCTORS
 (GRP259)**

TECHNICAL TRAINING INSTRUCTORS	PERCENT MEMBERS PERFORMING (N=19)
D133 PREPARE LESSON PLANS	100
D126 WRITE TEST QUESTIONS	95
D115 CONDUCT RESIDENT COURSE CLASSROOM TRAINING	89
D129 EVALUATE TRAINING PROGRESS OF CLASSROOM STUDENTS	89
D111 ADMINISTER TESTS	89
D118 COUNSEL TRAINEES ON TRAINING PROGRESS	89
D126 SCORE TESTS	84
D127 EVALUATE TRAINING MATERIALS	74
D128 MAINTAIN TRAINING RECORDS, CHARTS, OR GRADES	63
D122 DEVELOP TRAINING AIDS	63
B32 COUNSEL PERSONNEL ON PERSONAL OR MILITARY MATTERS	58

COMMISSIONER REPORT

TLO HANF - RPT

20 SEP 1971

STW/KRK

TABLE A36
TOOLS OR EQUIPMENT USED BY JOB GROUPS

TOOLS OR EQUIPMENT	GENERAL REPAIR MECHANICS					
	GENERAL REPAIR MECHANICS	GENERAL REPAIR MECHANICS	FIREFIGHTING VEHICLE MECHANICS	REFUELING VEHICLE MECHANICS	SERVICING EQUIPMENT MECHANICS	UNIT MECHANICS
FUNCTIONAL GROUP CLUSTER*	JOB TYPE** (GRP1043)	JOB TYPE** (GRP677)	JOB TYPE** (GRP1263)	JOB TYPE** (GRP533)	JOB TYPE** (GRP417)	JOB TYPE** (GRP417)
ARMATURE TESTERS	12	14	8	4	13	12
DYNAMOMETERS	14	14	7	2	7	9
ELECTRICAL CHARGING SYSTEM TESTERS	66	73	72	55	67	52
ELECTRONIC IGNITION TESTERS	28	31	26	6	20	18
ENGINE ANALYZERS	37	41	30	17	27	27
EXHAUST EMISSION TESTERS	14	16	10	8	-	3
GAS SHIELDED WELDING EQUIPMENT	12	14	10	-	13	6
HEADLIGHT TESTERS	23	26	17	9	-	6
HYDRAULIC TEST GAUGES	29	36	63	52	67	30
HYDROSTATIC HOSE TESTERS	11	13	10	93	-	18
MANUAL OR HYDRAULIC PRESSES	42	49	44	32	73	3
MASTER METERS	13	14	11	91	7	6
OSCILLOSCOPES	18	20	5	2	27	3
PRESSURE TANKS	5	6	-	52	-	3
TOXIC GAS ANALYZERS	5	6	3	36	5	7

*INCURRED IN THE VEHICLE REPAIR MECHANIC FUNCTIONAL GROUP (GR056)

**INCURRED IN THE CENTRAL REPAIR MECHANIC CLUSTER (GR403)

TABLE A37

A37

THEORY AND PRACTICE IN THE FIELD OF POLITICAL PARTIES

TABLE A38
TOOLS OR EQUIPMENT USED BY JOG GROUPS

QUALITY ASSURANCE PERSONNEL		VEHICLE BODY REPAIR PERSONNEL						TRAINING PERSONNEL					
QUALITY ASSURANCE CONTROLLER CLUSTER (GRP048)	QUALITY INSPECTORS CLUSTER (GRP257)	DIAGNOSTIC INSPECTORS CLUSTER (GRP253)	TIME SHOP PERSONNEL CLUSTER (GRP027)	VEHICLE BODY REPAIR SECTION PERSONNEL CLUSTER (GRP057)	VEHICLE BODY REPAIR WORKERS CLUSTER (GRP797)	VEHICLE BODY REPAIR TRAINING PERSONNEL CLUSTER (GRP767)	VEHICLE BODY REPAIR MONITORS CLUSTER (GRP019)	VEHICLE BODY REPAIR INSTRUCTORS CLUSTER (GRP276)	VEHICLE BODY REPAIR TRAINING PERSONNEL CLUSTER (GRP29)				
ARMATURE TESTERS	1	4	-	1	-	2	-	1	13	10	16	16	16
DTIAMIOMETERS	8	12	6	9	1	-	1	7	7	7	5	5	5
ELECTRICAL CHARGING SYSTEM TESTERS	53	46	64	20	3	4	1	21	19	19	16	16	16
ELECTRONIC IGNITION TESTERS	16	12	23	9	2	2	1	12	13	13	5	5	5
ENGINE ANALYZERS	20	19	26	11	1	2	1	10	7	7	11	11	11
EXHAUST EMISSION TESTERS	4	4	5	3	1	4	1	7	3	3	11	11	11
GAS SHIELDED WELDING EQUIPMENT	1	-	3	1	41	40	43	-	-	-	-	-	-
HEADLIGHT TESTERS	15	8	21	4	2	6	1	2	2	2	3	3	3
HYDRAULIC TIRE GAUGES	8	4	13	1	1	2	1	7	1	1	16	16	16
HYDROSTATIC HOSE TESTERS	4	3	-	-	-	-	-	1	1	1	-	-	-
HAND OR HYDRAULIC PUMPS	10	4	13	10	35	40	33	2	2	3	-	-	-
MASTER METERS	3	4	3	-	-	-	-	2	2	2	5	5	5
OSCILLOSCOPES	12	6	18	9	1	6	10	10	10	10	16	16	16
PRESSURE TAMES	1	-	-	-	1	1	1	1	1	1	-	-	-
TOXIC GAS ANALYZERS	-	-	-	-	-	-	-	-	-	-	5	5	5

* INCLUDED IN THE QUALITY ASSURANCE PERSONNEL CLUSTER (GRP048)

** INCLUDED IN THE VEHICLE BODY REPAIR PERSONNEL CLUSTER (GRP057)

*** INCLUDED IN THE TRAINING PERSONNEL CLUSTER (GRP019)

(SCANNED VERSION. THIS DOCUMENT CONTAINS UNPUBLISHED INFORMATION AND TRADESECRETS OF THE COMPANY.

TOOL OR EQUIPMENT	MANUFACTURER AND DISTRIBUTOR PERSONNEL									
	GENERAL SAFETY INSTRUMENTS TESTERS, CRIMERS (GPI)	SAFETY INSTRUMENTS TESTERS, CRIMERS (GPI)								
ANALYTIC TESTERS	5	4	4	4	4	4	4	4	4	4
BIOCHEMICALS	4	4	4	4	4	4	4	4	4	4
ELECTRICAL CHARGE STATION	25	44	44	44	44	44	44	44	44	44
ELECTRONIC INSTRUMENT TESTERS	14	14	14	14	14	14	14	14	14	14
FLUORESCENCE ANALYSIS	14	14	14	14	14	14	14	14	14	14
GAS FLOW METER TESTERS	7	7	7	7	7	7	7	7	7	7
GAS LEAKAGE DETECTORS	5	5	5	5	5	5	5	5	5	5
HAZARDOUS MATERIALS	11	11	11	11	11	11	11	11	11	11
HIGH DENSITY TESTERS	11	11	11	11	11	11	11	11	11	11
INDUSTRIAL GAS TESTERS	6	6	6	6	6	6	6	6	6	6
INDUSTRIAL LIQUID TESTERS	15	15	15	15	15	15	15	15	15	15
MATERIAL TESTERS	5	5	5	5	5	5	5	5	5	5
PIPER TAPES	7	7	7	7	7	7	7	7	7	7
TOXIC MATERIALS	3	3	3	3	3	3	3	3	3	3

TABLE A39
TOOLS OR EQUIPMENT USED BY JOE GROUP

TABLE A40
GENERAL PURPOSE VEHICLES AND EQUIPMENT MAINTAINED BY JOBS GROUPS
(PERCENT MECHANICS MAINTAINING)

VEHICLE OR EQUIPMENT	GENERAL REPAIR MECHANICS					
	GENERAL REPAIR	GENERAL MECHANICS	CLUSTER*	JOB TYPE**	JOB TYPE**	JOB TYPE**
	(GRP056)	(GRP403)	(GRP1043)	(GRP677)	(GRP1263)	(GRP533)
AMBULANCES	43	43	13	5	7	21
AMBULANCE TRUCKS	40	39	13	5	7	27
ARMORED PERSONNEL VEHICLES (RUBBER TIRED)	26	24	8	5	27	3
ARMORED PERSONNEL VEHICLES (TRACKED)	16	16	4	4	7	3
BUSES	51	50	17	8	13	39
CARGO TRUCKS, 4X2	51	51	25	11	27	27
CARGO TRUCKS, 4X6	39	40	12	8	20	15
CARGO TRUCKS, 6X6	39	39	13	5	13	61
JEEPS	43	42	23	8	13	73
LOW BED TRAILERS	47	47	11	6	27	24
MINIBUS VEHICLES	31	30	11	4	13	12
PICKUP TRUCKS, 4X2	61	59	53	23	13	30
PICKUP TRUCKS, 4X4	62	60	52	11	13	30
STAFF CARS OR SEDANS	50	48	19	8	13	18
STEP-VAN TRUCKS	49	48	19	8	13	12
TRAILERS, TRUCK-TRACTOR	55	54	40	10	33	27
TRUCK-TRACTORS, 6X6	44	43	27	8	20	18
TWO-WHEEL CARGO TRAILERS	36	36	12	7	13	27
UTILITY TRUCKS, 4X4	42	41	13	7	27	18
VAN TRUCKS	41	40	18	6	13	6
WEASERS	12	12	8	3	13	3

* INCLUDED IN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP (GRP056)

** INCLUDED IN THE GENERAL REPAIR MECHANICS CLUSTER (GRP403)

TABLE A41
GENERAL PURPOSE VEHICLES AND EQUIPMENT MAINTAINED BY JOBS GROUPS
(PERCENT NUMBER MAINTAINING)

* INCLUDED IN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP (GDR056)
** INCLUDED IN THE REPAIRING VEHICLE EQUIPMENT MAINTENANCE GROUP (GDR141)

TABLE A42
GENERAL PURPOSE VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT MEMBERS MAINTAINING)

VEHICLE OR EQUIPMENT	QUALITY ASSURANCE PERSONNEL				VEHICLE BODY REPAIR PERSONNEL				TRAINING PERSONNEL			
	CLUSTER (GRP049)	QUALITY ASSURANCE PERSONNEL CLUSTER (GRP251)	QUALITY CONTROL PERSONNEL CLUSTER (GRP253)	DIAGNOSTIC INSPECTORS JOB TYPE*	TIRE SHOP PERSONNEL CLUSTER (GRP227)	VEHICLE BODY REPAIR REPAIR SECTION PERSONNEL CLUSTER (GRP057)	VEHICLE BODY REPAIR REPAIR SECTION SUPERVISORS JOB TYPE** (GRP761)	VEHICLE BODY REPAIR REPAIR SECTION WORKERS JOB TYPE** (GRP761)	UNIT TRAINING PERSONNEL CLUSTER (GRP019)	TRAINING MONITORS CLUSTER (GRP276)	TECHNICAL TRAINING INSTRUCTORS JOB TYPE*** (GRP259)	
		VEHICLE BODY REPAIR PERSONNEL CLUSTER (GRP057)	VEHICLE BODY REPAIR REPAIR SECTION PERSONNEL CLUSTER (GRP761)	VEHICLE BODY REPAIR REPAIR SECTION SUPERVISORS JOB TYPE** (GRP761)	VEHICLE BODY REPAIR REPAIR SECTION WORKERS JOB TYPE** (GRP761)	TRAINING PERSONNEL CLUSTER (GRP019)	TRAINING MONITORS CLUSTER (GRP276)	TECHNICAL TRAINING INSTRUCTORS JOB TYPE*** (GRP259)				
AMBULANCES	58	58	62	86	88	94	87	4	3	-	-	
AMBULANCE TRUCKS	51	42	59	76	80	90	81	2	3	-	-	
ARMED PERSONNEL												
VEHICLES (MOTOR TIZED)	30	15	33	45	47	52	49	4	3	-	-	
ARMED PERSONNEL												
VEHICLES (TRACKED)	14	4	15	20	28	38	26	2	3	-	-	
MISSES	57	50	59	87	89	96	92	2	3	-	-	
CARGO TRUCKS, 4X2	61	54	64	82	87	96	87	4	3	-	-	
CARGO TRUCKS, 4X6	43	31	51	70	78	90	79	2	3	-	-	
CARGO TRUCKS, 6X6	39	35	44	63	65	69	65	5	7	-	-	
JEPPS	45	42	44	61	70	71	72	5	7	-	-	
LOW END TRAILERS	46	39	49	86	82	94	82	2	3	-	-	
MINIBUS VEHICLES	39	35	44	58	64	73	66	2	3	-	-	
PICKUP TRUCKS, 4X2	64	62	64	87	92	96	95	4	3	-	-	
PICKUP TRUCKS, 4X4	66	69	62	88	89	94	91	6	7	-	-	
STAFF CARS OR SEDANS	61	54	64	86	91	96	92	4	3	-	-	
STEP-VAN TRUCKS	60	62	59	85	90	96	90	2	3	-	-	
TRAILERS, TRUCK-TRACTOR	54	50	56	82	86	94	88	4	3	-	-	
TRACT-TRACTORS, 6X4	51	46	54	78	74	85	73	1	3	-	-	
TRACT-TRACTORS, 6X6	37	35	33	63	67	77	68	1	3	-	-	
TRUCK-CARGO TRAILERS	31	23	28	56	61	65	61	2	3	-	-	
UTILITY TRACTS, 4X4	46	35	46	76	78	81	81	2	3	-	-	
VAN TRUCKS	47	42	51	73	82	85	84	2	3	-	-	
WHEELS	10	8	10	25	20	20	17	2	3	-	-	

* INCLUDED IN THE QUALITY ASSURANCE PERSONNEL CLUSTER (GRP049)

** INCLUDED IN THE VEHICLE BODY REPAIR PERSONNEL CLUSTER (GRP057)

*** INCLUDED IN THE TRAINING PERSONNEL CLUSTER (GRP019)

TABLE A3
GENERAL PURPOSE VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PARADE PERSONNEL MAINTAINING)

VEHICLE OR EQUIPMENT CLUSTER (GP036)	MANAGERIAL AND SUPERVISORY PERSONNEL CLUSTER (GP1090)	MANAGERIAL AND SUPERVISORY PERSONNEL				VEHICLE MAINTENANCE MANAGERS JOB TYPE* (GP121)	VEHICLE MAINTENANCE MANAGERS JOB TYPE* (GP130)	VEHICLE MAINTENANCE MANAGERS JOB TYPE* (GP146)	VEHICLE MAINTENANCE MANAGERS JOB TYPE* (GP151)	
		VEHICLE MAINTENANCE SUPERVISOR	SUPPORT SUPERVISOR	MATERIALS SUPPLY SUPERVISOR	FIRST LINE SUPERVISORS INSPECTORS					
AMBULANCES	19	1	4	15	35	32	-	-	7	5
AMBULANCE TRUCKS	18	1	12	10	36	26	-	-	7	5
ARMED PERSONNEL VEHICLES (OTHER THAN) ARMED PERSONNEL VEHICLES (TRACTOR)	10	-	4	10	16	11	-	-	-	2
BUSES	3	-	4	5	9	2	-	-	7	2
CARGO TRUCKS, 4x2	22	2	16	10	42	36	-	-	7	10
CARGO TRUCKS, 4x4	23	2	23	5	44	45	-	-	7	10
CARGO TRUCKS, 6x6	15	1	36	5	22	32	-	-	7	7
CARGO TRUCKS, 6x6 JEEPS	19	5	32	15	20	32	-	-	7	7
LOW BED TRAILERS	17	2	16	15	24	34	-	-	7	10
RUMBLE VEHICLES	21	1	16	20	31	42	-	-	7	5
STAKE TRUCKS, 4x2	13	-	3	5	16	19	-	-	7	5
STAKE TRUCKS, 4x4	24	2	26	5	40	57	-	-	10	12
STEP-VAN TRAILERS	26	4	16	28	40	59	-	-	7	7
TRAILERS, TRUCK-TRACTOR	22	1	1	1	10	10	43	43	7	7
TRUCK-TRACTORS, 6x4	18	-	4	5	42	42	-	-	7	7
TRUCK-TRACTORS, 6x6	23	-	4	5	49	49	-	-	7	5
TRUCKS-TRACTORS, 6x6	17	-	1	1	49	49	-	-	7	7
TRUCKS, 4x4	14	14	4	4	16	18	18	18	10	10
UTILITY TRAILERS, 4x4	16	16	2	2	20	26	26	26	7	7
VAN TRAILERS	16	-	3	3	24	32	32	32	10	10
WEAPONS	1	-	1	1	1	2	-	-	-	-
					10	4				

*INCLUDED IN THE MANAGERIAL AND SUPERVISORY PERSONNEL CLUSTERS (GP036).

TABLE A44

BASE VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT MEMBERS MAINTAINING)

VEHICLE OR EQUIPMENT	GENERAL REPAIR MECHANICS						JOB TYPE** (GRP677)	JOB TYPE** (GRP1263)	JOB TYPE** (GRP533)	JOB TYPE** (GRP417)
	GENERAL REPAIR	GENERAL REPAIR	REFUELING	SERVICING	UNIT MECHANICS	MECHANICS				
AIR BLAST SNOW SWEEPERS	20	22	10	4	27	-	-	-	-	26
AIR JET VACUUM SWEEPERS	27	30	8	5	40	-	-	-	-	36
AGGREGATE DRIERS	9	10	6	2	20	-	-	-	-	13
AGGREGATE SPREADERS	11	12	8	2	20	-	-	-	-	15
ASPHALT DISTRIBUTORS	18	20	9	3	33	-	-	-	-	31
ASPHALT SPREADERS - FINISHERS	13	14	7	4	13	-	-	-	-	16
BACKHOES	32	33	8	5	47	12	38	-	-	38
COAL OR AGGREGATE CONVEYORS	10	11	8	4	13	3	14	-	-	14
COMPACTORS	14	15	8	4	20	9	20	-	-	20
CONCRETE MIXERS	17	19	6	5	13	3	17	-	-	13
CONCRETE TRAVEL MIXERS	11	11	6	4	13	-	-	-	-	13
CONCRETE VIBRATORS	11	12	7	4	20	9	15	-	-	15
CRANES, TRUCK MOUNTED	34	36	13	7	53	3	41	-	-	41
CRAWLER MOUNTED DITCHERS	15	16	5	5	7	3	18	-	-	18
DECONTAMINATION TRUCKS	12	13	9	3	33	-	-	-	-	14
DIESEL LOCOMOTIVES	9	9	7	4	7	3	13	-	-	13
DRAGLINES, CLAMSHELL	13	15	8	4	13	-	-	-	-	23
DUMP TRUCKS	45	46	18	8	67	27	49	-	-	49
DUMPSTERS	12	13	6	4	13	3	14	-	-	14
EARTH AUGERS	12	13	7	3	20	3	16	-	-	16
EARTH BORING AND PALE SETTING TRUCKS	14	15	7	3	27	-	-	-	-	18

*INCLUDED IN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP (GRP056)

** INCLUDED IN THE GENERAL REPAIR MECHANICS CLUSTER (GRP403)

TABLE A44 (CONTINUED)

BASE VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT MEMBERS MAINTAINING)

A45

VEHICLE OR EQUIPMENT	GENERAL REPAIR MECHANICS						JOB TYPE** (GRP533) (GRP417)
	GENERAL REPAIR (GRP403)	GENERAL REPAIR (GRP1043)	FIREFIGHTING VEHICLE MECHANICS CLUSTER* (GRP056)	REFUELING VEHICLE MECHANICS CLUSTER* (GRP677)	SERVICING EQUIPMENT MECHANICS CLUSTER* (GRP1263)	UNIT MECHANICS CLUSTER* (GRP677)	
ELECTRIC LINEMAN TRUCKS	29	31	9	6	60	6	30
FARM TRACTORS	42	44	17	8	53	30	46
FARM RIDING CONCRETE FINISHERS	10	11	5	3	13	-	13
FRONT-END LOADERS	35	37	11	6	53	21	40
GARBAGE PACKERS	13	14	8	3	40	6	16
GRASS CUTTING EQUIPMENT	25	27	7	5	53	18	37
HIGH REACH MAINTENANCE TRUCKS	31	32	9	5	80	3	28
INDUSTRIAL TRACTORS	28	30	9	5	47	-	35
JOINT CLEANSERS (CONCRETE)	8	9	7	3	7	-	13
LOAD-ALLS	12	13	10	5	27	3	15
MAGNETIC SWEEPERS	25	28	9	5	67	-	32
MUD HOG PUMPS	7	8	6	3	7	-	12
MUD JACKS	6	7	6	2	13	-	9
PAINT STRIPING MACHINES	8	9	6	2	6	-	12
PILE DRIVERS	6	7	4	2	-	8	8
ROLLER SNOWPLOWS	20	22	11	4	20	3	26
ROTARY SCRAPERS	10	11	4	3	13	-	13
ROTARY SNOWPLOWS	16	19	9	3	27	3	22
SANDSIFTERS	9	10	6	2	7	-	13
SELF-PROPELLED GRADERS	27	31	9	4	60	18	38
SELF-PROPELLED LOADERS, CRAWLER MOUNTED	15	17	7	4	47	3	22

*INCLUDED IN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP (GRP056)

**INCLUDED IN THE GENERAL REPAIR MECHANICS CLUSTER (GRP403)

TABLE A44 (CONTINUED)

**BASE VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT MEMBERS MAINTAINING)**

VEHICLE OR EQUIPMENT	CLUSTER*	JOB TYPE** (GRP1043)	GENERAL REPAIR MECHANICS						JOB TYPE** (GRP417)
			GENERAL REPAIR MECHANICS	GENERAL REPAIR CLUSTER* (GRP403)	REFUELING VEHICLE MECHANICS	SERVICING EQUIPMENT MECHANICS	UNIT MECHANICS	JOB TYPE** (GRP677)	
SELF-PROPELLED ROLLERS	19	21	9	3	40	6	6	22	
SELF-PROPELLED ROTARY SWEEPERS	16	18	8	2	40	3	3	21	
SELF-PROPELLED SCRAPERS	9	10	6	3	13	3	3	12	
SHEEPS FOOT ROLLERS	7	8	4	2	7	-	-	9	
SHOVELS (CRANE, DRAGLINE, BACKHOE, OR CRAWLER MOUNTED)	19	21	6	4	20	6	6	24	
SNOW ROLLERS	8	9	5	3	20	-	-	14	
STREET SWEEPERS	30	32	11	3	47	3	3	38	
STERE-WHEEL ROLLERS	17	19	5	2	53	3	3	25	
TANDEM ROLLERS	10	11	5	3	20	6	6	10	
TELEPHONE MAINTENANCE TRUCKS	32	33	9	5	73	9	9	33	
TOWED ROLLERS	14	15	7	2	33	3	3	22	
TOWED SWEEPERS	27	31	10	5	60	3	3	38	
TRACK MOUNTED SHOVELS (CRANES OR BACKHOES)	15	17	6	4	13	3	3	22	
TRACTOR DOZERS (CRAWLER)	28	31	10	6	47	15	15	37	
TRACTOR DOZERS (RUBBER TIRED)	11	12	8	4	7	-	-	17	
TRUCK MOUNTED ROCK DRILLS	8	9	8	4	13	3	3	13	
VACUUM SWEEPERS	29	32	8	5	40	-	-	41	
WATER DISPENSING TRAILERS	18	20	22	5	33	12	12	28	
WHEEL OR CRAWLER DITCHERS	11	13	7	4	20	-	-	18	
WHEEL WHEEL ROLLERS	14	16	7	3	20	3	3	22	
WRECKERS	43	44	12	7	60	55	55	49	

* INCLUDED IN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP (GRP056)

** INCLUDED IN THE GENERAL REPAIR MECHANICS CLUSTER (GRP403)

**BASE VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT MEMBERS MAINTAINING)**

TABLE A45

REFUELING VEHICLE EQUIPMENT MECHANICS			
VEHICLE OR EQUIPMENT	MINOR REPAIR	MINOR REPAIR	MINOR REPAIR
MINOR REPAIR			
FIREFIGHTING VEHICLE			
MECHANICS INDEPENDENT			
JOB TYPE* (GRP361)			
AIR BLAST SNOW SPREADERS	2	15	13
AIR JET VACUUM SPREADERS	4	23	23
AGGREGATE DRIVERS	-	15	6
AGGREGATE SPREADERS	-	8	6
ASPHALT DISTRIBUTORS	-	8	5
ASPHALT SPREADERS - FINISHERS	-	8	10
BACKHOES	2	15	13
COAL OR AGGREGATE CONVEYORS	6	31	31
CONCRETE FACTORIES	-	15	8
CONCRETE MIXERS	2	15	10
CONCRETE TRAVEL MIXERS	-	15	15
CONCRETE VIBRATORS	-	15	6
CRAZERS, TRUCK MOUNTED	-	15	8
CRANE BOOMED DITCHES	8	46	13
DECONTAMINATION TRUCKS	4	15	28
DIESEL LOCOMOTIVES	6	15	23
DRAGLINES, CLAMHELL	2	15	10
DUMP TRUCKS	2	15	8
DUMPSITES	13	62	5
LARTH AUGERS	2	15	35
ZARTH BORING AND PALE SETTING TRUCKS	4	15	13
			6
			13

IN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP (GMR56)

TABLE A45 (CONTINUED)
BASE VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT MEMBERS MAINTAINING)

VEHICLE OR EQUIPMENT	JOB TYPE* (GRP361)	JOB TYPE* (GRP409)	JOB TYPE* (GRP210)	JOB TYPE* (GRP106)	REFUELING VEHICLE EQUIPMENT MECHANICS						
					MINOR REPAIR	VEHICLE BODY AND FIREFIGHTING	MINOR REPAIR	MINOR REPAIR	ADMINISTRATIVE	INDEPENDENT	INDEPENDENT
ELECTRIC LINEMAN TRUCKS	8	23	26	25	25	21	33	25	6	8	11
FARM TRACTORS	21	46	33	25	25	-	8	6	6	13	21
FARM RIDING CONCRETE FINISHERS	-	-	8	6	6	-	-	-	-	8	11
FRONT-END LOADERS	8	15	31	25	25	15	31	25	8	8	11
GARBAGE PACKERS	4	23	8	19	19	23	21	13	8	8	11
GRASS CUTTING EQUIPMENT	8	23	19	19	19	13	16	11	11	16	16
HIGH BEACH MAINTENANCE TRUCKS	13	31	18	19	19	15	31	25	8	8	11
INDUSTRIAL TRACTORS	13	15	31	25	25	15	31	25	8	8	11
JOINT CLEANERS (CONCRETE)	2	15	10	-	-	15	10	-	5	5	5
LOAD-ALLS	2	15	10	6	6	15	10	6	8	8	11
MAGNETIC SWEEPS	8	23	23	6	6	23	23	11	6	6	16
MELO MUG PUMPS	-	15	8	-	-	15	8	-	3	3	-
MINI JACKS	-	-	8	-	-	15	8	-	3	3	-
PAINT STRIPING MACHINES	-	-	10	-	-	23	10	-	3	3	-
PILE DRIVERS	-	-	8	-	-	15	8	-	5	5	-
ROLLER SMOOTHERS	2	23	15	6	6	23	15	6	8	8	11
ROTARY SCRAPERS	-	15	5	-	-	15	5	-	3	3	-
ROTARY SHOVELS	-	15	8	-	-	15	8	-	5	5	-
SANDBLITTERS	-	15	8	-	-	15	8	-	5	5	-
SELF-PROPELLED GRADERS	4	14	14	13	13	15	18	18	5	5	5
SELF-PROPELLED LOADERS, CRAWLER MOUNTED	4	15	15	6	6	-	-	-	-	-	-

* INCLUDED IN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP (GRP056)

** INCLUDED IN THE REFUELING VEHICLE EQUIPMENT MECHANICS CLUSTER (GRP141)

TABLE A45 (CONTINUED)
BASE VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT MEMBERS MAINTAINING)

VEHICLE OR EQUIPMENT	JOB TYPE* (GRP381)	JOBTYPE** (GRP409)	JOBTYPE* (GRP210)	REFUELING VEHICLE EQUIPMENT MECHANICS				
				MINOR REPAIR	VEHICLE FIREFIGHTING VEHICLE MECHANICS INDEPENDENT	MINOR REPAIR MECHANICS INDEPENDENT	ENGINE AND MINOR REPAIR MECHANICS INDEPENDENT	MINOR REPAIR ADMINISTRATIVE PERSONNEL INDEPENDENT INDEPENDENT JOB TYPE* (GRP106)
SELF-PROPELLED ROLLERS	4	6	15	6	-	-	6	5
SELF-PROPELLED SHEPHERDS	4	-	13	6	-	-	5	5
SELF-PROPELLED SCRAPERS	2	8	5	-	-	-	5	5
SHEEPS FOOT ROLLERS	1	15	8	-	-	-	5	5
SHEOVELS (CRANE, DRAGLINE, BACKHOE, OR CRAWLER MOUNTED)	8	15	18	-	-	-	6	11
SNOW ROLLERS	1	15	5	6	-	-	8	11
STREET SCAFFTERS	6	15	28	19	-	-	11	16
STEEL-WHEEL ROLLERS	6	8	15	6	-	-	3	-
TANDEM ROLLERS	2	6	10	-	-	-	5	5
TELEPHONE MAINTENANCE TRUCKS	13	23	33	31	-	-	5	5
TOWED ROLLERS	4	8	10	-	-	-	6	11
TOWED SHEPHERDS	10	15	23	6	-	-	8	11
TRACK MOUNTED SHEPHERDS (CRANES OR BACKHOES)	2	15	13	6	-	-	8	11
TRACTOR DOZERS (CRAWLER)	8	15	26	19	-	-	11	16
TRACTOR DOZERS (NUMBER THREE)	-	15	13	-	-	-	8	11
TRUCK MOUNTED ROCK DRILLS	-	15	10	-	-	-	5	5
VACUUM SCAFFTERS	8	23	26	13	-	-	8	11
WATER DISPENSING TRAILERS	27	31	18	6	-	-	5	5
WHEEL OR CRAWLER DITCHERS	2	15	13	-	-	-	8	11
MOBILE WHEEL ROLLERS	2	15	10	-	-	-	5	5
WHEELERS	15	85	44	31	-	-	8	11

* INCLUDED IN THE VEHICLE MECHANICS FUNCTIONAL GROUP (GRP56)

** INCLUDED IN THE REFUELING VEHICLE EQUIPMENT MECHANICS GROUP (GRP141)

TABLE A46
BASE VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
 (PERCENT MEMBERS MAINTAINING)

VEHICLE OR EQUIPMENT	QUALITY ASSURANCE PERSONNEL				VEHICLE BODY REPAIR PERSONNEL				TRAINING PERSONNEL			
	QUALITY ASSURANCE PERSONNEL CLUSTER (GRP46)	QUALITY CONTROL INSPECTORS (GRP257)	DIAGNOSTIC INSPECTORS (GRP253)	TIRE SHOP PERSONNEL (GRP027)	VEHICLE BODY REPAIR SECTION PERSONNEL (GRP05)	VEHICLE BODY REPAIR SUPERVISORS (GRP797)	VEHICLE BODY REPAIR WORKERS (GRP67)	TRAINING PERSONNEL CLUSTER (GRP019)	UNIT TRAINING PERSONNEL MONITORS (GRP276)	TRAINING PERSONNEL CLUSTER (GRP019)	TECHNICAL TRAINING INSTRUCTORS (GRP259)	JOB TYPE** (GRP276)
AIR BLAST SNOW SWEEPERS	15	15	15	24	35	50	32	-	-	-	-	-
AIR JET VACUUM SWEEPERS	20	19	21	38	42	42	43	5	4	-	-	-
AGGREGATE DRILLS	3	4	-	11	20	29	17	-	-	-	-	-
AGGREGATE SPREADERS	7	8	5	14	19	25	17	-	-	-	-	-
ASPHALT DISTRIBUTORS	14	8	15	17	26	35	23	-	-	-	-	-
ASPHALT SPREADERS - FINISHERS	11	12	8	20	23	29	23	-	-	-	-	-
BACKHOES	38	35	39	48	53	58	52	-	-	-	-	-
COAL OR AGGREGATE CONVEYORS	5	4	5	20	20	33	16	-	-	-	-	-
COMPACTORS	11	12	10	21	21	31	18	-	-	-	-	-
CONCRETE MIXERS	18	15	21	17	22	38	16	-	-	-	-	-
CONCRETE TRAVEL MIXERS	5	4	5	18	17	25	15	-	-	-	-	-
CONCRETE VIBRATORS	10	-	13	17	22	31	20	-	-	-	-	-
CRANES, TRUCK MOUNTED	26	23	23	59	58	75	55	-	-	-	-	-
CRANE MOUNTED DITCHERS	4	-	5	20	24	33	21	-	-	-	-	-
DECONTAMINATION TRUCKS	6	6	6	27	27	35	26	-	-	-	-	-
DIESEL LOCOMOTIVES	7	4	5	17	18	27	16	-	-	-	-	-
DRAGLINES, CLAMSHELL	5	-	5	17	21	38	16	-	-	-	-	-
DUMP TRUCKS	50	50	49	68	84	85	84	-	-	-	-	-
DOZERS	15	12	15	27	24	33	23	-	-	-	-	-
EARTH AUGERS	10	4	10	17	22	38	18	-	-	-	-	-
EARTH BORING AND PALK SETTING TRUCKS	15	8	15	31	29	50	24	1	-	-	-	-

* INCLUDED IN THE QUALITY ASSURANCE PERSONNEL CLUSTER (GRP046)

** INCLUDED IN THE VEHICLE BODY REPAIR PERSONNEL CLUSTER (GRP057)

*** INCLUDED IN THE TRAINING PERSONNEL CLUSTER (GRP019)

TABLE A-6 (CONTINUED)
NAME VEHICLES AND EQUIPMENT MAINTAINED BY JOSE GROUP
(CREDIT: BUREAU MAINTAINED BY JOSE GROUP)

* INCLUDED IN THE QUALITY ASSURANCE PERSONNEL CLUSTER (S0204)
** INCLUDED IN THE VEHICLE BODY REPAIR PERSONNEL CLUSTER (S0205)
*** INCLUDED IN THE TRAINING PERSONNEL CLUSTER (S0205)

TABLE A46 (CONTINUED)
BASE VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT MEMBERS MAINTAINING)

VEHICLE OR EQUIPMENT	QUALITY ASSURANCE PERSONNEL			VEHICLE BODY REPAIR PERSONNEL			TRAINING PERSONNEL		
	QUALITY ASSURANCE PERSONNEL CLUSTER (GRP048)	QUALITY CONTROL INSPECTORS JOB TYPE* (GRP257)	DIAGNOSTIC INSPECTORS JOB TYPE* (GRP253)	TIRE SHOP PERSONNEL CLUSTER (GRP057)	VEHICLE BODY REPAIR SECTION SUPERVISORS CLUSTER (GRP027)	VEHICLE BODY REPAIR WORKERS CLUSTER (GRP797)	UNIT TRAINING PERSONNEL CLUSTER (GRP019)	TECHNICAL TRAINING INSTRUCTORS JOB TYPE** (GRP259)	
				JOB TYPE* (GRP253)	JOB TYPE** (GRP057)	JOB TYPE** (GRP797)	TRAINING PERSONNEL CLUSTER (GRP019)	TRAINING INSTRUCTORS JOB TYPE** (GRP259)	
SELF-PROPELLED DOLIES	16	6	21	14	22	35	20	-	
SELF-PROPELLED ROTARY SHERPERS	13	6	15	18	22	27	21	1	
SELF-PROPELLED SCRAPERS	6	6	3	17	16	27	13	1	
SHERPS FOOT ROLLERS	3	4	-	16	13	21	11	-	
SHOVELS (CRANE, DRAGLINE, BACKHOE, OR CRAWLER MOUNTED)	10	8	8	27	33	44	33	1	
SNOW ROLLERS	8	4	10	18	19	29	17	-	
STREET SHERPERS	30	31	26	39	55	71	54	1	
STEEL-WHEEL ROLLERS	16	12	18	16	21	35	16	-	
TAMPER ROLLERS	4	4	3	13	15	23	13	-	
TELEPHONE MAINTENANCE TRUCKS	46	50	46	56	69	90	64	-	
TOWED ROLLERS	10	8	10	16	18	23	14	1	
TOWED SHERPERS	28	23	33	28	40	69	34	2	
TRACK MOUNTED SHOVELS (CRANES (OR BACKHOES)	11	12	10	25	28	44	25	1	
TRACTOR DOZERS (CRAWLER)	23	19	23	17	38	54	35	1	
TRACTOR DOZERS (RUBBER TIRE)	7	12	3	25	20	29	18	1	
TRUCK MOUNTED BACK DRAILS	10	19	3	18	15	23	12	1	
VACUUM SHERPERS	28	31	26	38	48	67	44	1	
WATER DISPENSING TRAILERS	15	8	15	31	33	44	32	1	
WHEEL OR CRAWLER DITCHERS	5	12	-	20	17	29	13	1	
MOBILE WHEEL ROLLERS	15	15	13	20	20	38	14	1	
WEEKERS	50	54	46	62	70	77	4	3	

* INCLUDED IN THE QUALITY ASSURANCE PERSONNEL CLUSTER (GRP048)

** INCLUDED IN THE VEHICLE BODY REPAIR PERSONNEL CLUSTER (GRP057)

*** INCLUDED IN THE TRAINING PERSONNEL CLUSTER (GRP019)

TABLE A67
BASE VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT PERSONS MAINTAINING)

VEHICLE OR EQUIPMENT	MANAGERIAL AND SUPERVISORY PERSONNEL (GRP036)	MANAGERIAL AND SUPERVISORY PERSONNEL						VEHICLE MAINTENANCE CONTROLLERS INDEPENDENT JOB TYPE* (GRP02)
		SUPPORT PERSONNEL CLUSTER (GRP100)	VEHICLE MAINTENANCE SUPERVISORS JOB TYPE* (GRP100)	MAINTENANCE CONTROL SECTION NCOICs JOB TYPE* (GRP1121)	MAINTENANCE SHOP NCOICs JOB TYPE* (GRP480)	FIRST LINE SUPERVISORS JOBS TYPE* (GRP260)	VEHICLE MAINTENANCE INSPECTORS JOB TYPE* (GRP176)	
AIR BLAST SNOW SWEEPS	9	1	4	5	5	9	21	
AIR JET VACUUM SWEEPS	12	1	16	5	15	26		
AGGREGATE SPREADERS	3	-	4	5	2	4		
AGGREGATE SPREADERS	4	-	8	5	2	3		
ASPHALT DISTRIBUTORS	8	-	16	5	9	23		
ASPHALT SPREADERS - FINISHERS	6	-	16	5	7	9		
BACKHOES	14	-	24	5	18	34		
COAL OR AGGREGATE CONVEYORS	3	-	4	5	-	6		
CONTRACTORS	6	-	16	5	6	9		
CONCRETE MIXERS	7	-	20	5	6	15		
CONCRETE TRAVEL MIXERS	3	-	8	5	2	4		
CONCRETE VIBRATORS	3	-	-	5	4	6		
CRANES, TRUCK MOUNTED	16	-	24	10	20	42		
CRANE, MOBILE DITCHERS	6	-	16	5	9	9		
DECONTAMINATION TRUCKS	3	-	1	-	2	6		
DIESEL LOCOMOTIVES	2	-	-	5	-	6		
DRAGLINES, CLAMSHELL	4	1	12	5	4	8		
DUMP TRUCKS	20	1	20	15	33	38		
DOZERS	5	-	12	5	2	9		
EARTH ANCHES AND PALE SETTING	3	1	-	5	4	8		
TRUCKS		7	-	4	5	6		
						23		

*INCLUDED IN THE MANAGERIAL AND SUPERVISORY PERSONNEL CLUSTER (GRP036)

TABLE A47 (CONTINUED)
PAGE VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT MEMBERS MAINTAINING)

MANAGERIAL AND SUPERVISORY PERSONNEL									
VEHICLE OR EQUIPMENT CLUSTER	MANAGERIAL AND SUPERVISORY PERSONNEL CLUSTER (GRP036)	VEHICLE MAINTENANCE SUPERINTENDENTS	SUPPORT SECTION NCOICs	Maintenance CONTROL NCOICs	FIRST LINE SUPERVISORS	MAINTENANCE INSPECTORS	VEHICLE MAINTENANCE MANAGERS	VEHICLE MAINTENANCE CONTROLLERS	INDEPENDENT JOB TYPE* (GRP032)
		JOB TYPE* (GRP1090)	JOB TYPE* (GRP1121)	JOB TYPE* (GRP480)	JOB TYPE* (GRP260)	JOB TYPE* (GRP176)	JOB TYPE* (GRP538)		
ELECTRIC LUMBER TRUCKS	11	-	4	10	22	26	-	-	2
FARM TRACTORS	17	-	16	10	22	43	-	-	-
FARM RIDING CONCRETE FINISHERS	3	-	-	5	4	6	-	-	-
FRONT-END LOADERS	17	1	24	15	20	36	-	2	-
CARBAGE PACKERS	3	-	-	5	4	8	-	-	-
GRASS CUTTING EQUIPMENT	11	1	12	10	7	32	-	-	-
HIGH REACH MAINTENANCE TRUCKS	13	-	8	5	20	26	-	-	-
INDUSTRIAL TRACTORS	13	-	8	5	18	40	-	-	-
JOINT CLASSERS (CONCRETE)	2	-	4	5	2	4	-	-	-
LOAD-ALLS	4	-	4	5	2	9	-	-	-
MAGNETIC SWEEPS	9	-	12	5	11	23	-	-	-
MOB MOC PUMPS	2	-	5	2	2	6	-	-	-
HOE JACKS	2	-	5	4	4	4	-	-	-
PAINT STRIPING MACHINES	2	-	4	5	4	2	-	-	-
PILE DRIVERS	2	-	4	5	11	26	-	4	-
ROLLOVER SHREWDONS	9	-	4	5	5	9	-	21	-
ROTARY SCRAPERS	2	-	4	5	5	9	-	9	-
ROTARY SHREWDONS	7	-	4	5	5	16	-	36	-
SANDSPRITES	3	-	1	16	10	16	-	4	11
SELF-PROPELLED GRADERS	14	-	-	8	5	-	-	-	-
CRANE BOOMED LOADERS,	5	-	-	-	-	-	-	-	-

*INCLUDED IN THE MANAGERIAL AND SUPERVISORY PERSONNEL CLUSTER (GRP036)

TABLE A47 (CONTINUED)
BASE VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT PERSONS MAINTAINING)

MATERIAL AND SUPERVISORY PERSONNEL CLUSTER (GRP06)	VEHICLE MAINTENANCE SUPERVISORS CLUSTER (GRP1090)	MANAGERIAL AND SUPERVISORY PERSONNEL			VEHICLE MAINTENANCE MANAGERS JOB TYPE* (GRP1121)	VEHICLE MAINTENANCE INSPECTORS JOB TYPE* (GRP1161)	VEHICLE MAINTENANCE MANAGERS JOB TYPE* (GRP1161)	VEHICLE MAINTENANCE CONTROLLERS INDEPENDENT JOB TYPE (GRP002)
		SUPPORT SUCTION NCOICs	FIRST LINE SHOP NCOICs	JOB TYPE* (GRP480)				
SELF-PROPELLED ROLLERS	9	-	16	5	13	25	-	-
SELF-PROPELLED ROTARY SCAFFOLD	5	-	4	5	4	13	-	-
SELF-PROPELLED SCRAPERS	3	-	12	5	4	4	-	-
SHREWD FOOT ROLLERS	3	-	8	5	4	4	-	-
SHOVELS (CRAVE, DRAGLINE, BACKHOE, OR CRANE MOUNTED)	6	-	8	5	7	15	-	-
SNOW ROLLERS	2	-	-	5	-	4	-	-
STREET SCAFFOLDS	13	-	16	5	20	26	-	-
STEEL-WHEEL ROLLERS	6	-	8	5	6	21	-	-
TOWER ROLLERS	3	-	4	5	4	8	-	-
TRAILER MAINTENANCE TRAILERS	15	-	12	10	24	36	-	-
TRUCK ROLLERS	7	-	12	10	7	17	-	-
TOWER SCAFFOLDS	12	-	12	5	15	28	-	-
TRACK-HOISTED SHOVELS (CRANES OR BACKHOES)	5	-	8	5	6	8	-	-
TRACTOR DOZERS (CRAWLER)	13	2	16	15	15	30	-	-
TRACTOR DOZERS (ROTOR TIRES)	4	-	4	5	4	6	-	-
TRACTOR-MOUNTED ROCK BITILLS	2	-	4	5	-	4	-	-
VACUUM SCAFFOLDS	13	-	12	5	16	32	-	-
WATER DISPENSING TRAILERS	6	-	12	5	11	8	-	-
WHEEL OR CRAWLER DITCHERS	4	-	8	5	2	8	-	-
WHEEL/WHEEL ROLLERS	7	-	12	10	7	13	-	-
WHEELERS	18	1	20	10	24	47	2	-

*INCLUDED IN THE MANAGERIAL AND SUPERVISORY PERSONNEL CLUSTER (GRP036)

TABLE A48

FIREFIGHTING AND REFUELING VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT MEMBERS MAINTAINING)

GENERAL REPAIR MECHANICS						
VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP CLUSTER*	GENERAL REPAIR REPAIR MECHANICS CLUSTER*	GENERAL REPAIR FIREFIGHTING VEHICLE MECHANICS JOB TYPE**	REFUELING VEHICLE MECHANICS JOB TYPE**	SERVICING EQUIPMENT MECHANICS JOB TYPE**	UNIT MECHANICS JOB TYPE**	VEHICLE MECHANIC SECTION SUPERVISORS JOB TYPE** (GRP417)
VEHICLE OR EQUIPMENT (GRP056)	VEHICLE OR EQUIPMENT (GRP403)	VEHICLE OR EQUIPMENT (GRP1043)	VEHICLE OR EQUIPMENT (GRP677)	VEHICLE OR EQUIPMENT (GRP1263)	VEHICLE OR EQUIPMENT (GRP533)	VEHICLE OR EQUIPMENT (GRP417)
<u>FIRE AND CRASH FIREFIGHTING VEHICLES</u>						
CRASH FIRE TRUCKS	21	21	98	8	7	12
FORCIBLE ENTRY TRUCKS	14	15	91	6	7	3
RAMP FIREFIGHTING TRUCKS	17	17	96	7	7	3
RUNWAY FOAMER TRAILERS	16	16	90	5	7	-
STRUCTURE FIRE TRUCKS	19	19	92	7	7	12
						35
<u>REFUELING VEHICLES AND EQUIPMENT</u>						
A-1B FUEL TRAILERS	17	19	7	57	-	67
DEMINERALIZED WATER TANK TRUCKS	14	15	6	58	7	6
FUEL SERVICING TANK TRUCKS	20	22	9	95	7	27
HOSE CARTS	14	16	6	71	13	3
MD-3 WATER ALCOHOL TRAILERS	8	9	3	17	-	3
OIL SERVICING TRUCKS	9	10	7	27	-	3
						15

*INCLUDED IN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP (GRP056)

**INCLUDED IN THE GENERAL REPAIR MECHANICS CLUSTER (GRP403)

TABLE A49

FIREFIGHTING AND REFUELING VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT MEMBERS MAINTAINING)

<u>VEHICLE OR EQUIPMENT</u>	<u>REFUELING VEHICLE EQUIPMENT MECHANICS</u>					
	<u>MINOR REPAIR</u>	<u>VEHICLE BODY AND MINOR REPAIR</u>	<u>ENGINE AND MINOR REPAIR</u>	<u>MINOR REPAIR AND ADMINISTRATIVE PERSONNEL</u>	<u>REFUELING VEHICLE EQUIPMENT MECHANICS INDEPENDENT JOBSITE*</u>	<u>REFUELING VEHICLE EQUIPMENT MECHANICS CLUSTER*</u>
<u>JOB TYPE**</u>	<u>(GRP381)</u>	<u>(GRP409)</u>	<u>(GRP210)</u>	<u>(GRP106)</u>	<u>(GRP164)</u>	
<u>CRASH AND CRASH FIRE FIGHTING VEHICLES</u>						
CRASH FIRE TRUCKS	94	31	13	19	8	11
FORCIBLE ENTRY TRUCKS	54	15	3	6	8	11
RAMP FIREFIGHTING TRUCKS	85	23	5	6	8	11
RUNWAY FOAMER TRAILERS	77	23	8	6	8	11
STRUCTURE FIRE TRUCKS	88	23	8	19	8	11
<u>REFUELING VEHICLES AND EQUIPMENT</u>						
A-1B FUEL TRAILERS	4	62	8	25	37	37
DEMILITARIZED WATER TANK TRUCKS	4	23	8	13	68	68
FUEL SERVICING TANK TRUCKS	11	31	8	19	100	100
HOSE CARTS	2	15	8	6	74	74
HD-3 WATER ALCOHOL TRAILERS	-	15	8	-	11	11
OIL SERVICING TRUCKS	-	15	5	-	13	11

* INCLUDED IN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP (GRP056)

** INCLUDED IN THE REFUELING VEHICLE EQUIPMENT MECHANICS CLUSTER (GRP141)

TABLE A50
FIREFIGHTING AND REFUELING VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT MEMBERS MAINTAINING)

VEHICLE OR EQUIPMENT	QUALITY ASSURANCE PERSONNEL				VEHICLE BODY REPAIR PERSONNEL				TRAINING PERSONNEL			
	QUALITY ASSURANCE PERSONNEL	QUALITY CONTROL INSPECTORS	DIAGNOSTIC INSPECTORS	TIRE SHOP PERSONNEL	VEHICLE BODY REPAIR SECTION	VEHICLE BODY REPAIR	VEHICLE BODY REPAIR	UNIT TRAINING MONITORS	TRAINING PERSONNEL	TRAINING PERSONNEL	TECHNICAL TRAINING INSTRUCTORS	JOB TYPE++
	CLUSTER (GRP048)	JOB TYPE+ (GRP257)	JOB TYPE+ (GRP253)	CLUSTER (GRP027)	CLUSTER (GRP057)	CLUSTER (GRP057)	CLUSTER (GRP019)	CLUSTER (GRP019)	CLUSTER (GRP019)	CLUSTER (GRP019)	CLUSTER (GRP259)	JOB TYPE++ (GRP259)
FIRE AND CRASH FIREFIGHTING VEHICLES												
CRASH FIRE TRUCKS	12	8	13	44	60	79	58	2	-	-	-	5
FORCIBLE ENTRY TRUCKS	11	8	13	25	27	48	22	1	-	-	-	-
RAMP FIREFIGHTING TRUCKS	11	8	10	37	40	63	35	1	-	-	-	-
RUNWAY FOAMER TRAILERS	11	8	10	31	34	52	30	1	-	-	-	-
STRUCTURE FIRE TRUCKS	11	4	13	39	44	60	42	1	-	-	-	-
REFUELING VEHICLES AND EQUIPMENT												
A-1B FUEL TRAILERS	8	12	3	23	24	35	20	4	3	-	-	5
DEMINERALIZED WATER TANK TRUCKS	6	12	5	27	40	56	37	1	-	-	-	-
FUEL SERVICING TANK TRUCKS	10	8	8	35	45	65	42	1	-	-	-	-
HOSE CARTS	7	12	3	28	29	46	25	1	-	-	-	-
ND-3 WATER ALCOHOL TRAILERS	7	12	3	18	20	33	17	1	-	-	-	-
OIL SERVICING TRUCKS	7	8	5	18	24	33	23	1	-	-	-	-

* INCLUDED IN THE QUALITY ASSURANCE PERSONNEL CLUSTER (GRP048)

** INCLUDED IN THE VEHICLE BODY REPAIR PERSONNEL CLUSTER (GRP057)

*** INCLUDED IN THE TRAINING PERSONNEL CLUSTER (GRP019)

TABLE A51
FIREFIGHTING AND REFUELING VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT MEMBERS MAINTAINING)

		MANAGERIAL AND SUPERVISORY PERSONNEL					
MANAGERIAL AND SUPERVISORY PERSONNEL CLUSTER (GRP036)	VEHICLE MAINTENANCE SUPERINTENDENTS JOB TYPE* (GRP100)	SUPPORT SECTION NCOICs	Maintenance CONTROL NCOICs	Maintenance SHOP NCOICs	FIRST LINE SUPERVISORS	VEHICLE MAINTENANCE MANAGERS	VEHICLE MAINTENANCE CONTROLLERS INDEPENDENT MANAGERS
		JOB TYPE* (GRP1121)	JOB TYPE* (GRP480)	JOB TYPE* (GRP260)	JOB TYPE* (GRP176)	JOB TYPE* (GRP538)	JOB TYPE* (GRP161)
FIRE AND CRASH FIREFIGHTING VEHICLES							
CRASH FIRE TRUCKS	8	-	4	5	9	19	-
FORCIBLE ENTRY TRUCKS	6	-	4	5	-	19	-
RAMP FIREFIGHTING TRUCKS	7	-	4	5	6	21	-
RUNWAY FOAMER TRAILERS	6	-	8	5	4	13	-
STRUCTURE FIRE TRUCKS	8	-	4	10	11	17	-
REFUELING VEHICLES AND EQUIPMENT							
A-13 FUEL TRAILERS	10	2	32	20	4	17	7
DEMINERALIZED WATER TANK TRUCKS	6	-	8	5	4	15	-
FUEL SERVICING TANK TRUCKS	10	1	28	10	9	21	7
HOSE CARTS	6	-	12	5	6	13	-
MD-3 WATER ALCOHOL TRAILERS	3	-	4	5	4	4	-
OIL SERVICING TRUCKS	4	-	8	5	6	11	-

* INCLUDED IN THE MANAGERIAL AND SUPERVISORY PERSONNEL CLUSTER (GRP036)

TABLE A52
MATERIALS HANDLING AND TOWING AND SERVICING VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT MEMBERS MAINTAINING)

VEHICLE OR EQUIPMENT	GENERAL REPAIR MECHANICS					
	GENERAL REPAIR VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP	GENERAL REPAIR MECHANICS FUNCTIONAL CLUSTER*	FIREFIGHTING VEHICLE MECHANICS JOB TYPE** (GRP1063)	SERVICING EQUIPMENT MECHANICS JOB TYPE** (GRP677)	UNIT MECHANICS JOB TYPE** (GRP1265)	VEHICLE MECHANIC SECTION SUPERVISORS JOB TYPE** (GRP533) (GRP417)
MATERIALS HANDLING EQUIPMENT						
AIRCRAFT CARGO HANDLING TRUCKS	16	17	6	4	33	3
BOMB HANDLING CRANES	10	10	5	2	20	-
CARGO LOADERS OR UNLOADERS (25K)	25	27	7	4	33	6
CARGO LOADERS OR UNLOADERS (40K)	17	18	8	2	13	3
CRASH RECOVERY CRANES (50 TONS)	12	13	6	3	7	-
DIESEL POWERED ROUGH TERRAIN FORKLIFTS	24	26	9	4	20	9
ELECTRIC POWERED FORKLIFTS	25	28	7	3	20	3
GASOLINE ENGINE POWERED TRACKLAYING FORKLIFTS	8	10	7	3	-	3
GASOLINE ENGINE POWERED WHEELED FORKLIFTS	38	40	11	7	33	21
HI-LIFT TRUCKS	20	22	9	4	53	3
HUNITIONS TRANSFER TRUCKS	8	8	5	4	20	-
TACTICAL CARGO LOADERS OR UNLOADERS (25K)	14	16	6	5	20	6
WAREHOUSE TRACTORS	30	32	7	5	27	9
TOWING AND SERVICING VEHICLES AND EQUIPMENT						
AEROSPACE GROUND EQUIPMENT (AGE) TOWING EQUIPMENT	18	20	6	7	33	6
AIRCRAFT TOWING TRACTORS OR TUGS	33	35	10	8	87	6
CALAVAR PLATFORM SERVICING TRUCKS	9	10	5	2	47	3
DEICERS, OTHER THAN STANAY OR REDDING	15	16	7	7	53	-
PLATFORM TRUCKS OTHER THAN CALAVARS	8	8	4	3	20	3
REDDING TECHNOMATIC DEICERS	9	11	4	3	27	-
STANAY DEICERS	9	10	5	5	20	6
WATER OR WASTE TANK TRUCKS	17	18	8	11	53	9

* INCLUDED IN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP (GRP056)

** INCLUDED IN THE GENERAL REPAIR MECHANICS CLUSTER (GRP403)

TABLE A53
MATERIALS HANDLING AND TOWING AND SERVICING VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT MEMBERS MAINTAINING)

VEHICLE OR EQUIPMENT	MINOR REPAIR	VEHICLE BODY AND MINOR REPAIR	ENGINE AND MINOR REPAIR	MINOR REPAIR AND ADMINISTRATIVE	REFUELING VEHICLE EQUIPMENT MECHANICS	
					MECHANICS INDEPENDENT	REFUELING VEHICLE EQUIPMENT SECTION SUPERVISORS JOB TYPE** (GRP184)
VEHICLES HANDLING EQUIPMENT	JOB TYPE** (GRP409)	VEHICLE MECHANICS INDEPENDENT	REFUELING VEHICLE EQUIPMENT PERSONNEL INDEPENDENT	REFUELING VEHICLE EQUIPMENT MECHANICS CLUSTER* (GRP141)	REFUELING VEHICLE EQUIPMENT PERSONNEL INDEPENDENT	REFUELING VEHICLE EQUIPMENT MECHANICS CLUSTER* (GRP141)
AIRCRAFT CARGO HANDLING TRUCKS	15	23	8	13	5	5
BOMB HANDLING CRANES	-	15	8	6	8	11
CARGO LOADERS OR UNLOADERS (25K)	13	23	31	25	11	16
CARGO LOADERS OR UNLOADERS (40K)	6	23	23	13	5	5
CRASH RECOVERY CRANES (50 TONS)	-	15	15	-	5	5
DIESEL POWERED ROUGH TERRAIN FORKLIFTS	10	46	31	13	11	16
ELECTRIC POWERED FORKLIFTS	8	23	23	13	8	11
GASOLINE ENGINE POWERED TRACKLAYING FORKLIFTS	2	15	8	-	3	-
GASOLINE ENGINE POWERED WHEELED FORKLIFTS	21	39	31	31	5	5
HI-LIFT TRUCKS	17	15	8	19	5	5
MUNITIONS TRANSFER TRUCKS	2	15	3	-	5	5
TACTICAL CARGO LOADERS OR UNLOADERS (25K)	6	15	10	13	8	11
WAREHOUSE TRACTORS	17	23	28	38	11	16
TOWING AND SERVICING VEHICLES AND EQUIPMENT						
AEROSPACE GROUND EQUIPMENT (AGE) TOWING EQUIPMENT	6	23	15	6	5	5
AIRCRAFT TOWING TRACTORS OR TUGS	21	23	31	19	8	11
CALAVAR PLATFORM SERVICING TRUCKS	6	8	-	-	-	-
DEICERS, OTHER THAN STAMAN OR REDDING	4	23	10	-	3	-
PLATFORM TRUCKS OTHER THAN CALAVARS	-	23	3	-	3	-
REDDING TECHNOMATIC DEICERS	2	15	3	-	5	5
STAMAN DEICERS	-	15	3	6	5	5
WATER OR WASTE TANK TRUCKS	4	23	18	13	5	5

* INCLUDED IN THE VEHICLE REPAIR MECHANICS FUNCTIONAL GROUP (GRP056)

** INCLUDED IN THE REFUELING VEHICLE EQUIPMENT MECHANICS CLUSTER (GRP141)

TABLE A54
MATERIALS HANDLING EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT MEMBERS MAINTAINING)

VEHICLE OR EQUIPMENT	QUALITY ASSURANCE PERSONNEL				VEHICLE BODY REPAIR PERSONNEL				TRAINING PERSONNEL			
	QUALITY ASSURANCE PERSONNEL CLUSTER (GRP048)	QUALITY CONTROL INSPECTORS CLUSTER (GRP257)	DIAGNOSTIC INSPECTORS CLUSTER (GRP253)	JOB TYPE* (GRP257)	TIRE SHOP PERSONNEL	VEHICLE BODY REPAIR SECTION PERSONNEL	VEHICLE BODY REPAIR WORKERS	TRAINING PERSONNEL	UNIT TRAINING MONITORS	TRAINING INSTRUCTORS	TECHNICAL TRAINING INSTRUCTORS	JOB TYPE** (GRP259)
					CLUSTER (GRP027)	CLUSTER (GRP057)	CLUSTER (GRP767)	CLUSTER (GRP019)	CLUSTER (GRP276)	CLUSTER (GRP259)	CLUSTER (GRP259)	
AIRCRAFT CARGO HANDLING TRUCKS	22	31	18	31	33	30	29	1	-	-	-	-
BOMB HANDLING CRANES	11	8	13	20	14	25	11	-	-	-	-	-
CARGO LOADERS OR UNLOADERS (25K)	27	19	33	37	47	65	43	1	-	-	-	-
CARGO LOADERS OR UNLOADERS (40K)	12	15	10	34	39	54	37	1	-	-	-	-
CRASH RECOVERY CRANES (50 TONS)	14	8	15	18	24	40	20	1	-	-	-	-
DIESEL POWERED ROUGH TERRAIN FORKLIFTS	26	23	28	32	42	52	40	1	-	-	-	-
ELECTRICAL POWERED FORKLIFTS	28	23	31	24	49	56	48	1	-	-	-	-
GASOLINE ENGINE POWERED TRACKLAYING FORKLIFTS	4	8	-	17	18	21	17	-	-	-	-	-
GASOLINE ENGINE POWERED WHEELED FORKLIFTS	43	35	49	49	63	65	65	-	-	-	-	-
HI-LIFT TRUCKS	20	23	18	28	44	58	41	-	-	-	-	-
HORIZONTAL TRANSFER TRUCKS	8	12	5	16	16	29	12	-	-	-	-	-
TACTICAL CARGO LOADERS OR UNLOADERS (25K)	20	27	15	25	31	38	30	1	-	-	-	-
WAREHOUSE TRACTORS	35	19	46	48	55	75	51	2	-	-	-	-

* INCLUDED IN THE QUALITY ASSURANCE PERSONNEL CLUSTER (GRP048)

** INCLUDED IN THE VEHICLE BODY REPAIR PERSONNEL CLUSTER (GRP057)

*** INCLUDED IN THE TRAINING PERSONNEL CLUSTER (GRP019)

TABLE A54 (CONTINUED)
TOWING AND SERVICING VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT PERSONNEL MAINTAINING)

VEHICLE OR EQUIPMENT	QUALITY ASSURANCE PERSONNEL				VEHICLE BODY REPAIR PERSONNEL				TRAINING PERSONNEL			
	CLUSTER (GRP048)	QUALITY ASSURANCE PERSONNEL	QUALITY CONTROL INSPECTORS	DIAGNOSTIC INSPECTORS	TIRES SHOP PERSONNEL	VEHICLE BODY REPAIR SECTION	VEHICLE BODY REPAIR PERSONNEL	WORKERS	TRAINING PERSONNEL	UNIT TRAINING MONITORS	TRAINING PERSONNEL	TECHNICAL TRAINING INSTRUCTORS
		JOB TYPE* (GRP257)	JOB TYPE* (GRP253)	JOB TYPE* (GRP253)	CLUSTER (GRP027)	CLUSTER (GRP057)	CLUSTER (GRP057)	JOB TYPE** (GRP797)	JOB TYPE** (GRP767)	CLUSTER (GRP019)	JOB TYPE*** (GRP276)	JOB TYPE*** (GRP259)
AEROSPACE GROUND EQUIPMENT (AGE) TOWING EQUIPMENT	19	15	21	30	38	48	36	-	-	-	-	-
AIRCRAFT TOWING TRACTORS OR TUGS	46	50	41	45	66	73	68	1	-	-	-	-
CALAVAR PLATFORM SERVICING TRUCKS	10	15	5	21	19	29	16	-	-	-	-	-
DEVICES, OTHER THAN STANAY OR REDDING PLATFORM TRUCKS OTHER THAN CALAVARS	15	23	6	26	28	46	25	2	-	-	-	-
REDDING HYDRAULIC DEVICES STANAY DEVICES	7	6	6	18	20	31	17	1	-	-	-	-
WATER OR WASTE TANK TRUCKS	10	8	13	14	17	75	16	2	-	-	-	-
	14	19	10	25	36	46	36	1	-	-	-	-

* INCLUDED IN THE QUALITY ASSURANCE PERSONNEL CLUSTER (GRP048)

** INCLUDED IN THE VEHICLE BODY REPAIR PERSONNEL CLUSTER (GRP057)

*** INCLUDED IN THE TRAINING PERSONNEL CLUSTER (GRP019)

TABLE A55
MATERIALS HANDLING EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT MEMBERS MAINTAINING)

VEHICLE OR EQUIPMENT	MANAGERIAL AND SUPERVISORY PERSONNEL						MAINTENANCE CONTROLLERS INDEPENDENT JOB TYPE* (GRP082)
	MANAGERIAL AND SUPERVISORY PERSONNEL CLUSTER (GRP036)	VEHICLE MAINTENANCE SUPERINTENDENTS (GRP1090)	SUPPORT SPECIALISTS (NCOICs) JOBTYP* (GRP1121)	MAINTENANCE CONTROL NCOICs JOBTYP* (GRP460)	FIRST LINE SUPERVISORS JOBTYP* (GRP260)	VEHICLE MAINTENANCE INSPECTORS JOBTYP* (GRP538)	
AIRCRAFT CARGO HANDLING TRUCKS	8	-	4	5	9	21	-
BOB HANGLING CRAMES	2	-	-	5	-	8	-
CARGO LOADERS OR UNLOADERS (25K)	11	1	4	5	9	30	7
CARGO LOADERS OR UNLOADERS (40K)	6	-	4	5	2	13	7
CRASH RECOVERY CRANES (50 TONS)	4	-	-	5	-	6	-
DIESEL POWERED MOUNT TERRAIN FORKLIFTS	12	2	16	10	6	25	-
ELECTRIC POWERED FORKLIFTS	9	-	4	5	15	17	-
GASOLINE ENGINE POWERED TRACTORLAVING FORKLIFTS	2	-	-	5	-	4	-
GASOLINE ENGINE POWERED WHEELBARROW FORKLIFTS	16	1	16	5	16	45	7
HI-LIFT TRUCKS	8	-	-	5	11	19	-
MUNITIONS TRANSFER TRUCKS	1	-	-	5	-	2	-
TACTICAL CARGO LOADERS OR UNLOADERS (25K)	5	1	-	5	2	8	-
WAREHOUSE TRACTORS	14	-	6	5	20	40	2

*INCLUDED IN THE MANAGERIAL AND SUPERVISORY PERSONNEL CLUSTER (GRP036)

TABLE A55 (CONTINUED)
TOWING AND SERVICING VEHICLES AND EQUIPMENT MAINTAINED BY JOB GROUPS
(PERCENT HOURS MAINTAINING)

MANAGERIAL AND SUPERVISORY PERSONNEL									
VEHICLE OR EQUIPMENT	MANAGERIAL AND SUPERVISORY PERSONNEL CLUSTER (GRP036)	VEHICLE MAINTENANCE SUPERINTENDENTS JOB TYPE* (GRP1090)	SUPPORT SECTION MCIOCS JOB TYPE* (GRP1121)	Maintenance CONTROL MCIOCS JOB TYPE* (GRP480)	Maintenance SHOP MCIOCS JOB TYPE* (GRP260)	FIRST LINE SUPERVISORS MCIOCS JOB TYPE* (GRP176)	VEHICLE MAINTENANCE INSPECTORS MCIOCS JOB TYPE* (GRP538)	VEHICLE MAINTENANCE MANAGERS MCIOCS JOB TYPE* (GRP161)	MAINTENANCE CONTROLLERS INDEPENDENT JOB TYPE* (GRP082)
AEROSPACE GROUND EQUIPMENT									
AIRCRAFT TOWING EQUIPMENT	8	-	-	4	5	4	26	-	-
AIRCRAFT TOWING TRACTORS OR TUSS	14	-	-	8	5	15	38	-	-
CALAVAR PLATFORM SERVICING TRUCKS	3	-	-	-	5	-	2	7	-
DRIVERS, OTHER THAN STANAY OR HEDDING	5	-	-	-	5	6	11	-	-
PLATFOAM TRUCKS OTHER THAN CALAVARS	1	-	-	-	5	-	2	2	-
HEDDING TACTOMATIC DRIVERS	5	-	-	-	5	2	15	8	-
STANAY DRIVERS	3	1	-	-	5	-	7	19	-
WATER OR WASTE TANK TRUCKS	7	1	-	4	5	-	-	-	-

*INCLUDES IN THE MANAGERIAL AND SUPERVISORY PERSONNEL CLUSTER (GRP036)